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BY

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PART I.

Conservation. Delhi.

I remarked in my last year's Report that the stimulus given by the Coronation Durbar had resulted in a display of exceptional archæological activity at Delhi. Thanks to the transfer of the Capital city, that activity, I am gratified to say, is continuing unabated, and energetic steps are now being taken to do for the whole body of monuments within the new Imperial enclave what has already been done for the most notable ones among them—namely, to put them into a state of thorough repair and lay out their surroundings in a manner worthy of the first city of India. To this end, each and every one of them is now being carefully overhauled and catalogued by Mr. G. Sanderson and his Assistant, Maulvi Zafar Hasan, and an exhaustive scheme worked out for their repair and permanent maintenance. In the meantime, the generosity of the Government of India has enabled the Department to carry out during the past twelve months some important measures among the remains at Indrapat, the Qutb, and other buildings in the vicinity.

The condition of Sher Shah's Fort at Indrapat had long claimed attention, and further delay in the repairs of the north-west wall, which, with its bastions, is some 725 feet in length and includes the well known Talaqi Gate, would have had disastrous results. The lower portions of the wall, both inside and out, have now been underpinned, *kaccha* walls have been removed from the arcading inside the wall, and the whole extent of the upper part (Plate II, *c*) has been preserved by securing the loose and jagged masonry with lime concrete worked into the interstices between the stones. Fallen debris, encumbering the surfaces of the inner roofs, has also been cleared away and the Talaqi Gate, which constitutes the central feature, can now be seen to its full extent. Moreover, a road running from the Grand Trunk Road through this gateway to the interior of the Fort, is now under construction, and will be available for use next cold weather, affording a pleasing method of approach to perhaps the most interesting group of monuments which the new Capital possesses. Lastly, the present village which now occupies the interior of the Fort, to the sore detriment of the monuments near by, has been acquired by Government, and is to be entirely removed, so that the space may be laid out in a fitting and becoming manner.

Further south of Indrapat, repairs have been effected to the interesting gates of the Arab Sarai, opposite Humayun's tomb, while in the garden of the latter the edging

of the paths has been raised, in order to balance the changes in levels necessitated by the water supply; the enclosure wall surrounding the tomb of Isa Khan has been rebuilt in part; an efficient drainage system has been provided to carry off water from the group of buildings at Nizamu-d-Din; the tomb of Sikandar Lodi has been provided with a new *chajja*, similar in design to the original one, and the *kaccha* huts surrounding the Khirki Masjid, some 2 miles east of the Qutb, and perhaps the most characteristic mosque of all those built during the reign of Firoz Shah Tuglaq, have been acquired and removed.

Prior to the handing over of Delhi to the Imperial Government, a scheme had been actively taken up by the Punjab Government for improving the surroundings of the Qutb, and, as a first step, the Delhi-Gurgaon Road had been diverted outside the area of the buildings. This year, the area has been fenced round and the ground within, which now extends from the south of the Alai Darwaza to a boundary line north of the unfinished *minar* of Alau-ud-Din Khalji, has been lowered to its correct levels; modern enclosure walls have been removed, and misleading paths have been relaid on more appropriate lines, while the approach roads to the enclave have also been realigned to facilitate carriage traffic, of which there is an ever-increasing amount during the cold weather. At the same time, in conformity with the scheme followed at the Delhi Fort [1], the area has been laid out with grass lawns and shrubberies which demarcate the position of the old courtyards and colonnades; arrangements have been made for a special water-supply; and the untidy thatched dâk bungalows and servants' quarters, which were once the first objects to meet the eye of the visitor on his arrival at the Qutb, have been entirely removed, thus throwing open to view the buildings alongside the famous *Minar*.

Punjab. In the Punjab, activity among Muhammadan Monuments centred mainly round Lahore, where the chief work during the year was the improvement of the Hazuri Bagh. Till recently, this Bagh, of which Ranjit Singh's marble *Baradari* is the outstanding feature, was overplanted, and exhibited but little coherence in its design. An examination, however, of the ground brought to light remains of various fountain channels and causeways belonging apparently to the Sikh period, and in accordance with the indications which they afforded, the garden has now been divided up into four main *parterres* with water-channels and causeways between, and each of these *parterres* has been similarly sub-divided into lesser plots. At the same time, the roadway from the Roshnai Darwaza to the opening on the north side of the enclosure has been diverted so as not to interfere with the square formation of the garden; judicious planting of trees and creepers has been provided for and so arranged that the main architectural features in view—the Jami Masjid gateway, the Central Pavilion, and the Hazuri Bagh Gate of the Fort—can be seen to their full advantage, and in correct relation to one another. Besides these works further improvements have also been effected at the tomb of Nur Jahan at Shahdara (Plate II, *b*) some of the floors being relaid in *lakhauri* bricks, walls repaired, the old plaster decoration exposed, and the surroundings beautified by the laying down of lawns and terraces.

[1] The lay-out of the Delhi Fort, as it appeared in the time of the Mughals, is shown in Mr. Sanderson's admirable bird's-eye view reproduced in Plate I.

In the United Provinces, the conservation of two well-known monuments—the so called "Zenana" in the Allahabad Fort and the Palace of Akbar in the Agra Fort—has been brought to completion. In both cases the work has been in progress for several years, and in both cases it has been of a similar kind, involving, first, the demolition of numerous modern accretions, and, secondly, the repair of the older fabrics. In the Zenana at Allahabad the removal of whitewash, paint and structural additions made by the British, brought to light the old decorative paintings with which the interior chambers had formerly been adorned, as well as many architectural members, such as *chajjas* and parapets, that had long been lost to view. These discoveries and an engraving of the Daniell brothers, executed when the building was still intact at the close of the 18th century, rendered the work of repair a simple matter, particularly as no attempt has been made to rebuild the *chhattris* which once crowned the roof. **United Provinces.**

In the case of the Akbari Mahal, the task of making good all the damage that had been done to the halls and other apartments, had been finished in the preceding year, and it remained only to install an efficient plant for the supply of water, to lay down lawns in front of the Mahal in keeping with those of the adjacent Palace of Jahangir, and to plant shrubberies and creepers—the former to indicate the position of the old wings of the Palace now destroyed, the latter to mask the bare and unsightly walls which disfigure this corner of the Fort (Plate II, *a*). Two other enterprises at Agra also deserve notice. The first of these was the conservation of two of the old garden pavilions or *chhattris*, as they are commonly called, which stand out so prominently and form such picturesque features on the riverside north of the Ram Bagh. The second was the exposure, by the removal of modern lamps and roadways, of the deep plinths round the spacious platforms north and south of the entrance to Akbar's tomb. At the same time, the masonry of these platforms was repaired, and vast heaps of accumulated debris removed from outside the entrance, a measure which has immeasurably enhanced the imposing aspect of this Gateway.

In comparison with the expenditure on Muhammadan Monuments, the cost of repairs to Hindu and Buddhist Monuments in the Northern Circle has been relatively small, amounting to Rs. 1,011 in the Punjab and Rs. 12,960 in the United Provinces. The most important monuments in the repairer's hands were the recently excavated remains at Saheth-Maheth, the brick temple at Tinduli, three shrines at Brindaban and the Dhamekh Stupa at Sarnath. With regard to the last mentioned, the massive ashlar stone work round the drum of the *stūpa* has been admirably rebuilt by the Public Works Department at the points where it had begun to buckle outwards, but the new cap of glaring white plaster on the summit is anything but satisfactory. The advice tendered by Dr. Vogel when officiating Director-General was to the effect that the outer courses of brick work should be removed, the core well grouted and plastered over to prevent the percolation of rain water, and the outer bricks then replaced. Arrangements are now being made for the ugly new capping to be removed and for Dr. Vogel's instructions to be carried out.

I mentioned last year that the newly excavated courtyard at Takht-i-Bahi, which contains some fine stucco relievos in excellent preservation, was to be protected by a roof of reinforced concrete. Detailed plans for the construction of this **Frontier Province.**

roof were prepared by the Garrison Engineer, Risalpur, but it was subsequently found that the use of reinforced concrete was precluded owing to the difficulty of obtaining a sufficient supply of water on the summit of the hill, and accordingly fresh plans and estimates had to be prepared by the Assistant Commanding Royal Engineer, Nowshera. In the meantime, further clearance has been carried out among the minor ruins to the east and south of the main structure and several well executed sculptures brought to light, including two relievos *in situ*, as well as a cinerary urn.

Western Circle. Considering the vast number and importance of the ancient monuments in Western India, the annual allotment made for their upkeep by the Local Government is unduly small, and as the claims of conservation increase, it becomes less and less adequate to the needs of the Presidency. So far, however, as funds, Provincial or Imperial would permit, the progress made during the past year has been steady and substantial. At Nasik, effective drainage has been provided for the Pandu Lena Caves by lowering the level of the ground outside and providing catch-water gutters on the rock face above the caves with cross gutters at intervals to carry off the rain water. Masonry pillars, too, have been constructed in several of the caves to support the roof, and Cave XIX, which was excavated during the reign of the Satavahana King, Krishna, has been cleared of the deep accumulation of debris which was choking it. At Bijapur, the modern trophy stand in front of the Naqqar Khana was removed, and the old approach to the Gol Gumbaz, which passed beneath its portals, restored. Here, too, the restoration of the deep, rich cornice round the mosque attached to the Ibrahim Rauza was completed, stone from the quarries of Sholapur being used and the same methods of reconstruction pursued that were adopted with such success in the case of the Gol Gumbaz. In the same district a start was made in the conservation of the famous groups of temples at Aihole and Pattadkal by the clearance of debris from the buildings and the erection of dry stone compound walls. In the Raigarh Fort, a flat top has been provided for the tomb of Sivaji and a paved stone floor, doors and steps for the temple of Mahadeva. At Ahmedabad, the disintegrated stonework in the domed roof of the Jami Masjid has been replaced by new, the terraces have been rendered in plaster, and the broken perforated panels both in this building and in the mosque of Dada Harir have been repaired. At Bassein, jungle cutting on an extensive scale has been carried out as a preliminary to more thorough measures among the archæological buildings there. Lastly, at Khudabad in Sind, the Jami Masjid and Tomb of Yar Muhammed have undergone various structural repairs directed towards rendering the fabrics watertight and preserving what is left of the enamelled tile-work which adorns their walls.

Central India. Turning aside to the Central India and other Native States attached to the Western Circle there is relatively little to be chronicled. Of the extensive campaign of exploration and repair which I am carrying out on behalf of Her Highness the Begam of Bhopal among the celebrated Buddhist Monuments at Sanchi, I shall speak in greater detail presently. Here, I need only remark that it embraces the clearance of jungle from the whole of the sacred enclave, the excavation of the greater part of the area, and the structural repair of each and every one of the buildings unearthed,

including *stūpas*, chapels and monasteries, as well as of those which were already standing above ground. In contrast with the infinite labour lavished upon the decoration of these monuments, their foundations and walls are singularly defective and unstable, and in many cases the effective preservation of the latter can only be achieved by extensively dismantling and rebuilding them. In H. H. the Nizam's Dominions a considerable sum was expended in completing the repair of the minarets in the Fort of Daulatabad in accordance with the suggestions made by the late Viceroy, Lord Minto, and various measures were taken for the preservation of the Caves at Ellora, the Bibi Maqbara at Aurangabad and the mosque and tombs in the Fort of Gulbarga. But, apart from Sanchi, by far the most important enterprise going on at the present moment in any Native State of India is that at the Fortress of Mandu in the State of Dhar. The work here, which is being carried out in accordance with my personal instructions, has been in progress for several years, and one by one all the chief monuments are being reclaimed from the jungle and recalled to some measure of their former beauty. Those which were the subject of special attention during the year under review were the Jami Masjid, Hoshang's tomb, the Jahaz Mahal and Hindola Mahal, Dilawar Khan's mosque and the tomb of Darya Khan. At the first mentioned, relieving arches and buttresses were inserted in the north and south colonnades, to strengthen the original arches which had cracked; face stones were replaced, where missing, in the north, south and west walls; frieze and coping stones were renewed in the south-east corner and on the plinth of the west wall; and the marble rosettes were repaired in one of the *mihrabs* of the prayer-chamber. At Hoshang's tomb, the enclosure wall was put in repair, the foundations of the south wall were underpinned, the breast wall on the south side was dismantled and rebuilt according to its original design, and the whole compound was thoroughly tidied, and gaps in the marble pavement of the tomb platform were filled with new slabs. In the *dharmsala*, too, attached to this tomb a considerable amount of new stone-work had to be inserted in the plinth of the building and in the framework of the doors. At the Jahaz Mahal dense jungle was eradicated from the west wall and from every side of the reservoir; debris was cleared from the structure on the north side of the central tower; missing masonry over the *chajjas* was restored, and cracked lintels in the interior were supported by angle irons. The courtyard of the Hindola Mahal was further freed of debris, and some ugly and useless tie-rods were removed from its western balcony. At Dilawar Khan's mosque the ladies' gallery was repaired at points where masonry had fallen away. And in Darya Khan's tomb the grave stones, which had to be removed when the floor was relaid, were replaced in their original positions.

Of conservation in the Madras Presidency, it is almost enough to say that it **Southern Circle.** was carried out on the same careful and consistent lines as before, and that the chief centres of activity remained unchanged. In the historic capital of Vijayanagar new approach roads and paths were made, or the existing ones regravelled at various buildings, including the Krishna Temple, "Concert hall", elephant stables and the citadel; stone revetment walls were erected for protecting the bases of the Lotus Mahal, the Muhammadan Watch Tower, the Ganigetta Temple near Kamalapur, and the Bath near the Temple of Sarasvati, and the basements themselves were

underpinned and repaired at the underground shrine and the fifth Jain Temple. Here, also, the *gopuram* of the Achyutanarayana Temple was strengthened, the roof of a *mandapam* attached to the Pattibhirama Temple was made watertight, and the compound of this temple cleared of debris, while a variety of measures were carried out among the buildings in the Zenana enclosure. At the Seven Pagodas the roof of the Krishna Mandapam was completely remade, a wall was constructed above the revetment of the Shore Temple, and Casuarina trees planted on the southern side; a railing was provided for the summit of the old Lighthouse; and repairs were done to the entrance and basement of Arjuna's *ratha*. At Kumbakonam, special repairs were executed to the *mandapam* of the Nagesvara and Banapurisvara Temples, and the floors of the *gopuram* of the Sarangapani Temple were entirely renewed with teak joists and planks. At Tanjore, the rampart wall of the Sivaganga Fort was underpinned on the north and south sides, and the tenth bastion was rebuilt, while, to prevent the further cracking of the building, masonry walls were inserted in the ground floor of the arsenal in the Palace. In the Fort at Gingee, the repacking of the rampart wall was continued; extensive clearance of vegetation and debris was effected in the Siva Temple at Kamasavalli and in the Brihadisvara shrine at Gangaikondasholapuram; and further substantial progress was made with the repair of the Temples of Valikondapuram, Tiruvellarai and Nilagunda.

Eastern Circle.

The year's record of conservation in the Eastern Presidency has been less satisfactory. On the preservation of all the monuments of Bengal a sum of less than Rs. 5,000 has been expended, and among the various items, to which this sum was devoted, there are none of sufficient magnitude to be noticed here. The repartition of Bengal, it is true, deprived Bengal of most of its famous historical monuments, but there are still a large number which demand a great deal more attention than they have been receiving, and it is much to be hoped that the Local Government will take steps to have a more systematic programme of repair formulated, and to make more liberal financial provision than it has hitherto done. As a fact, I understand that sufficient funds are provided to meet the estimates submitted, and that the present inactivity is due to the latter not being forthcoming from the Public Works Department. In this connection, it is noteworthy that Mr. Blakiston complains in his Provincial Report that some of the ancient monuments in Bengal are inspected by the Public Works' Officers not more than once in four or five years, while others that have been repaired have not been placed on their books at all, with the result that no further thought is given to their maintenance. Mr. Blakiston also calls attention to cases of repairs being carried out without his knowledge and of the instructions given in the estimates not being adhered to—all of which facts seem to argue an apathy on the part of the local Public Works' Officers which is now fortunately rare in India.

Bihar and Orissa.

On the other hand, the progress made in the other provinces comprised in the Eastern Circle, *viz.*, in Bihar and Orissa, Assam and the Central Provinces, leaves little to be desired. In Bihar and Orissa the most important and, withal, the most difficult task has been the raising of the two ponderous Asoka pillars at Rampurwa from the morasses in which they had sunk (Plate IV, *a*). The shafts of these pillars have now been removed to the summit of a small hillock near by, and fixed in hori-

zontal positions, the larger of the two being raised on piers, so that the inscription which it bears can be freely examined, and at the same time protected by a suitable shelter. The capitals, let me add, which were excavated in 1907-08, had already been taken to the Indian Museum, where they now occupy imposing positions in the entrance hall. At Konarak, in Orissa, some three thousand rupees were expended in the collection of materials and carrying out of structural repairs to the Black Pagoda. At Deo-Bonarak, in the Shahabad District, a suitable shed was erected for the preservation of local sculptures. At Sassaram, the tomb of Alawal Khan (Plate IV, *b*) was thoroughly repaired and a gigantic scaffolding was erected in the interior of Sher Shah's Tomb for the examination of the soffit of the dome, about the security of which there was some doubt. Lastly, in the Fortress of Rohtasgarh, several reservoirs were cleaned, iron gratings fixed in the openings of some of the buildings, and the monuments as a whole completely freed of jungle and tidied.

In the Central Provinces, the most considerable undertakings were those concerned with the following monuments: with the Chaunsath Jogini Temple at Bheraghat, where numerous broken images that had already been pieced together by my Assistant were duly fixed in their appropriate positions; with the Vishnu Varaha Temple at Majholi, with the Mahadev Temple at Nohta (Plate V, *a*), which was provided with a compound wall; with the Fort of Gavilgarh; with the tombs of Adil Shah and Shah Nawaz Khan and the Raja's *chhattri* at Burhanpur; and with another nameless *chhattri* near the dák bungalow at Balapur. **Central Provinces.**

In Assam, special attention was given to the conservation of the Sibdole Temple at Nigriting and to the Bishnudole Temple at Jaisagar, while at Dimapur a number of the broken chessmen and V-shaped columns, to which I have referred in previous reports, were fitted together and re-erected. **Assam.**

To complete the story of what has been achieved during the past year, we pass, finally, to Burma. Here, the depression in local finance to which I alluded last year was still affecting archæology as much as the other branches of Public Works, and, though the Provincial allotment was raised by Rs. 5,000, it was still far short of what is needed to meet the requirements of the Province. Fortunately for the multitude of Buddhist monuments in Burma, private individuals are still coming forward to assist in their repair, and so relieve the Local Government of some of its obligations. Thus, at Mandalay the well known Ascetic, U Kan Ti, whom I mentioned last year, has duly continued the reconstruction of the Zayats in the North Moat Road, and has received permission to erect a railing round the Thudama and Patan Zayats in the Cantonment Lines. At Mingun, the Siribyume Pagoda, which suffered much from a severe earthquake in May 1912, is being intelligently and carefully repaired by the Headman of that place, Maung Po Kyu, assisted by a Buddhist monk and a rich timber merchant of Mandalay. And at Sagaing a newly discovered image of the Buddha, of exquisite workmanship, is being re-erected and protected by a suitable shed at the expense of a police officer named Maung Pe. Of the funds provided by Government the bulk was devoted to ordinary annual maintenance and repair, the only estimates of a special character being those relating to the Mandalay Palace; to the pyatthats of the Sangyaung and Taiktaw monasteries at Mandalay (Plate III), the roofs of which had to be **Burma.**

renewed; to the Nat-Hlaung-Kyaung at Pagan, where the doorway and window arches had to be strengthened, and to the Bawbawgyi Pagoda at Hmawza, where the terraces and superstructure had to be repaired and rendered waterproof.

Ancient Monuments Preservation Act.

In Burma, action was taken under sections 20 and 23 of the Ancient Monuments Act to prohibit excavations in the town of Pegu and its environs, and in the same Province as well as in the Punjab, United Provinces, Delhi and Bombay, action was taken to protect a number of monuments under section 3. In my last report I expressed regret that the Local Government had found itself unable to declare the most important of the monuments in the Bijapur District protected. The necessary steps to this end have now been taken, but the Superintendent in Western India notices that agreements with the owners of most of these monuments still remain to be drawn up.

Cases of wilful damage to monuments were few. In Burma, a treasure-seeker was caught digging into the tomb of King Mindon, and sentenced to a year's imprisonment under section 379 of the Indian Penal Code. Some other offenders were also caught excavating for bricks among the pagodas and mounds in the old Palace at Ava, and the case was referred for action to the Deputy Commissioner, Sagaing. In the Frontier Province, some damage was also done to the stucco ornamentation in court T XIV at Takht-i-Bahi, and a relievo figure was stolen, but in this case, unfortunately, it was not possible to trace the delinquents.

Listing of Monuments.

In the Northern Circle, lists of monuments were prepared in the Kulu, Mandi and Sukhet Districts and in the greater part of Kangra by Pandit Hirananda, and some 220 monuments were catalogued in the Delhi enclave by Mr. Sanderson. In the Eastern, Western and Southern Circles further progress was made in amplifying and improving the existing lists; and in Burma the lists for the six divisions of Burma proper—namely, Mandalay, Sagaing, Meiktila, Minbu, Pegu, Irrawaddy and Tenasserim, were brought to completion by Mr. Taw Sein Ko. The same officer, to whom the thanks of Government are due for having carried this work to a finish while he was on leave, has also set about the revision of the late Dr. Forchhammer's list of antiquities in Arakan, and to this end is collecting information from the Deputy Commissioners in Akyab and Sandoway regarding the present custody of the monuments in their districts.

Exploration and Research.

In the domain of exploration the past year has been specially memorable. For the first time in the history of archæological enterprise in this country, the Government of India has taken up the thorough and exhaustive examination of some of the great city sites of antiquity; for the first time, also, a private individual—Mr. Ratan Tata of Bombay—has come forward and, with public-spirited generosity, offered to bear the cost of one of these excavations; and for the first time an Indian Darbar—I refer to Her Highness the Begam of Bhopal—has undertaken at its own expense and on equally systematic lines the exploration of another important group of remains situated within its dominions. The sites which the Imperial Government has selected for exploration are the city of Taxila in the north of the Punjab and of Pataliputra near the modern Patna. It is the latter of these excavations that Mr. Ratan Tata has agreed to finance.

Taxila.

To the excavations which I conducted on the ancient site of Taxila I purpose

to devote a separate and fully illustrated article in the second part of this Report, and accordingly I shall content myself with repeating here a brief summary of my work which I gave before the Punjab Historical Society. The foundation of Taxila goes back to a very remote age, but of the epoch before Alexander the Great we know practically nothing beyond the fact that it was probably included in the Achæmenian Empire of Persia, and that it enjoyed a great reputation as a University town, famous for the arts and sciences of the day. Alexander descended on the Punjab and received the submission of Taxila in 326 B.C., but four years later the Macedonian garrisons were driven out by Chandragupta, and Taxila then passed under the dominion of the Mauryan Emperors, to whom it remained in subjection until the death of Asoka. Then, about 190 B.C., Demetrios, the son-in-law of Antiochos the Great, extended the Bactrian power over the north-west of the Punjab and paved the way for the establishment of a line of Greek princes who were ruling at Taxila for the greater part of the second century before our era. After them came a dynasty of local Saka and Pahlava kings—Maues, Azes, Azilises and others—who carry us down to about 60 A.D., and these, in turn, are succeeded by the Kushan Emperors, among whom the name of Kanishka is the most celebrated. Thus, within four centuries Taxila became subject to five separate Empires—the Macedonian, the Mauryan, the Bactrian, the Scytho-Parthian and the Kushan,— and from these widely different civilisations, extending from Greece to Western China and from the steppes of Russia to the Bay of Bengal, she must have inherited much of the culture and of the arts peculiar to each. With the decline of the Kushan power and the rise of the Imperial Guptas in the 4th century, the history of Taxila, so far as we are concerned, comes to an end. Her power and importance gradually waned, and when the Chinese pilgrim, Hiuen Thsang, visited the city in the 7th century, he found that the State had become a dependency of Kashmir, and that the monuments of her former greatness were in ruins.

The remains of this famous city are situated about 20 miles to the north-west of Rawal Pindi, in a particularly pleasant and well-watered valley, with the snow ranges of Kashmir to the north and east, and lower hills, including the Margalla range, completing the circle on the south and west. This position on the great trade route which used to connect Hindustan with Central and Western Asia, coupled with the strength of its natural defences, and a constant supply of water, sufficiently explains the growth of the city in early times. A reference to the map of the site published by General Cunningham[1] will show that there were three chief settlements—the Bir Mound to the south, Sir Kap in the middle, and Sir Sukh to the north, with clusters of smaller remains grouped around each. These three areas appear to represent three separate cities, built like the several cities of Delhi, by successive dynasties or despots, the parallel between the two cities being the closer for the reason that in each case the new capitals were shifted further and further north. The three cities at Taxila with the remains round about them cover an area of a dozen square miles or more, and the examination of such a vast site is likely to occupy a great many years. At present, I have been at work for less

[1] C. S. R., Vol. II, Pl. III.

than three months and have made trial diggings at four places only—namely, at the Chir Tope, near the south-east corner of the site, in Sir Kap; at Jhandial, and on the Bir Mound.

The Chir Tope.

The *Chir* or "Split" Tope, as it is called from the great cleft through its centre, stands on a lofty plateau high above the Tamra-nullah, which is manifestly identical with the stream called Tiberonalo or Tiberopotamos by classical authors. The plateau is not a natural formation, but is composed mainly of the mud walls of village habitations which must have existed here from time immemorial. In the climate of Northern India such habitations crumble quickly, the moment they lose the protection of their roofs; then other houses are erected on their ruins, and so the process goes on, every century witnessing the addition of half a dozen feet or more to the height of the mound. In this case, the last habitations, prior to the plateau being occupied by a Buddhist establishment, appear to have belonged to the period of Greek rule; for immediately below the foundations of one of the Buddhist buildings I found a collection of 28 coins of the Greek king Zoilos. The *stūpa* itself is now much ruined—so much so, that fifty years ago Sir Alexander Cunningham affirmed that nothing was left of its outer casing. In this, however, he was wrong; for on excavating on the north and south sides I found that the base of the *stūpa* was relatively well preserved, and round about it I brought to light a number of other interesting structures, including *stūpas*, chapels and monastic buildings, which, extending as they do over a period of some 400 years, furnish us with important data for the history of Early Indian architecture. Thanks also to the coins and other minor antiquities found in association with them, they help us to settle several chronological problems. The main *stūpa*, as now exposed, proves to have had a circular base with a flight of steps approaching the berm on the north and probably at the other cardinal points also (Plate XI, *c*). The core of the structure is of rough rubble masonry, the outer facing being of ponderous limestone blocks, with carefully chiselled *kankar* stone let in between them for the mouldings and pilasters, the whole having once been finished with a coating of lime plaster and paint. From its style as well as from the style of the subsidiary buildings and the deposits found in them, this structure may confidently be assigned to about the middle of the 1st century B.C. It is important to observe how the other edifices gradually sprang into existence around this *stūpa*; for upon their chronological sequence much depends. At the time when the great *stūpa* was erected, the plateau around it was levelled up and covered with a layer of river sand, with a floor of lime plaster above. On this floor or on the debris which had accumulated immediately above it, I found several small *stūpas*—some on the north and some on the south—belonging to a circle of such memorials, all built more or less in the same style as the great *stūpa*, but all necessarily later than it. From one of these *stūpas* I extracted a relic casket of steatite, with a miniature gold box inside, containing a fragment of bone and a number of pearls, carved cornelians and other stones, but unfortunately there were no coins or other records of its date (Plate XII, *c*). For the accumulation of debris on the original floor and for the construction of these small *stūpas* themselves we must allow at least five or six decades, and as the *stūpas* had fallen partly to decay before the next buildings were constructed over them, it is fairly certain that they

must have been standing until the middle of the 1st century A.D. The next stage is marked by the erection of gateways opposite the steps of the Great Tope, and of a circle of small chapels, which are similar in plan as well as in purpose to those at Jamalgarhi in the Frontier Province. It is against the Buddhist principles ever to destroy a *stūpa* or any other work of merit, and, accordingly, when these chapels were built, their walls were carried over the tops of the small *stūpas* that I have described, and are thus manifestly later in date. These chapels, as well as the walls flanking the gateways, are built in a very distinctive style of masonry, commonly called diaper-patterned. In the earlier walls, the boulders employed are relatively small and the masonry has a singularly neat appearance; but later on, when the chapels were repaired and other walls added, the boulders become more massive, and the little piles of stone which fill the interstices between them are less carefully laid. The earlier and neater of these diaper types seems to have come into fashion at Taxila in the latter half of the 1st century A.D.; the later and coarser in the 2nd century A.D. With the lapse of time, these chapels in turn fell to ruin; their interiors were filled with fallen debris, and over this (at a height, that is to say of five to six feet above the original floor) were constructed other *stūpas* and chapels in still another style. This fourth style is characterised by ashlar and diaper masonry combined, and appears to have come into vogue in the 3rd century A.D. At this period the dome of the main *stūpa*, which seems to have collapsed, was also rebuilt in more solid fashion with construction walls radiating from the centre.

Thus, we have four clear and distinct types of building: first, the rubble work of the Scytho-Parthian period; secondly, the neat small diaper; thirdly, the coarse and massive diaper; and, fourthly, the semi-ashlar, semi-diaper type. These four consecutive types are equally well illustrated in other buildings which I excavated on the top of the plateau, but I need not go into details regarding them. In one of these buildings of Parthian date, I found a floor of glass tiles of bright azure blue, with a few other colours mingled with them—the first complete specimens of their kind that have yet been found in India. This floor belonged, not to the original building, but to a later repair, and it was obvious from the careless manner in which the tiles were laid, that they were not originally intended for this place but had been taken from some other monument. In another building on the same side of the tope a valuable find of a different kind came to light. The debris here contained a number of blocks of *kankar* stone that had evidently come from a small *stūpa*, and in one of the blocks was a small hollow containing two steatite relic caskets with miniature gold caskets inside them, holding the relics, and some pearls and other stones. An apsidal temple, which I unearthed near by, is also worthy of notice, in view of the great rarity of structural buildings of this style. Last winter, I was fortunate in finding not only this one at Taxila but two others at Sanchi and Sonari in Central India, which antedate by several centuries any other examples previously known to us.

It remains to notice two other structures which I excavated on the plateau: namely, the two *stūpas*, which I designate by the letters J and K. Both are designed in more or less the same manner, with a square base rising in diminishing terraces

and crowned by a round dome above. In both *stūpas*, the lowest terrace is adorned with a row of Corinthian pilasters surmounted by a frieze and dentil cornice; in both, there is a trefoil niche occupying the centre of each side between the pilasters, and in both the decorative features are cut out of *kankar* stone and finished in stucco. But here the resemblance between the two ends. In K—that is, the *stūpa* to the north-west of the main Tope—the core is much more solidly built, the pilasters are slenderer, the mouldings, capitals and other details are of better design, and the figure of the Buddha in the northern niche displays far more masterly modelling than the reliefs of *stūpa* J (Plate XI, *d*). All these differences go to prove that the *stūpa* J is considerably later than the *stūpa* K. The latter, however, is contemporary with the buildings of type 4 and is to be assigned to the 3rd century A.D. The *stūpa* J therefore must have been built towards the end of that century or in the beginning of the 4th, a date which accords very well with the style of the sculptures, which clearly mark a transition from the Gandhara to the Gupta style of the 4th century. The small figures in Scythian dress at the side of the seated Buddha reliefs on the lowest terrace are of great interest as indicating the influence of the Kushans at the time of its erection, namely, at the end of the 3rd century A.D.

As to the minor antiquities found on this site, they divide themselves into three main classes: coins, Gandhara sculptures, and terracottas or stucco figures. The whole site of Taxila is remarkably prolific in coins, and it has taken me several months to clean and identify the many hundreds which I recovered during the short time I was there. At the Chir Tope, the most numerous are those of the Kushan Kings, and it is significant that they were all found in the debris which gathered over the ruins of the Parthian buildings: that is, in and around the chapels of diaper masonry—coins of Kujula and Vima Kadphises in the lower strata, approximately contemporary with the erection of the chapels; coins of Kanishka, Huvishka and Vasudeva above them. Now, we have seen that these chapels were not erected until about the middle of the 1st century of our era, that they were repaired and added to in the 2nd century A.D. and that the 4th type of building came into vogue in the 3rd century A.D. Accordingly, I assign the deposits of the coins of the two Kadphises to the latter part of the 1st century A.D., and those of Kanishka and Huvishka to the 2nd century. No coins of Kanishka or his successors were discovered anywhere except in the debris which formed after the early chapels fell to decay. The coins may have been in circulation for some time before the deposits accumulated, but I have no hesitation in saying that the evidence from this site entirely precludes 58 B.C. as the date of Kanishka's accession.

Of sculptures of the Gandhara style, several hundred specimens were found, mainly in a group on the south side of the main *stūpa*, and lying not far below the surface (Plate XII, *a*). As I have not yet carried my diggings far enough to identify the building from which they came, I cannot speak with confidence as to their date, but I may note that not a single fragment of Gandhara sculpture has been found in the Parthian or early Kushana strata, and my own opinion is that these sculptures from the Chir Tope will be found to belong to the 2nd or early 3rd century A.D.,

that is to about the time of Vasudeva. I should add, however, that their style presupposes a development extending over a long period.

Notwithstanding that Taxila has always been so famous for its stone, I did not find any stone images or reliefs manufactured locally. The artists of Taxila appear to have preferred plaster or, occasionally, terracotta, as their medium, and of these materials I found about two hundred heads or figures at the Chir Tope (Plate XII, *b*). The terracotta life-size heads are, I believe, the only specimens of their kind that have been discovered in India. All these images were set up in the latest chapels around the main Tope and cannot, therefore, be earlier than the 3rd century A.D. Probably, they belong to the latter half of that century or the early part of the 4th.

From the Chir Tope we pass over the top of the Hathial ridge into the city of **Sir Kap.**
Sir Kap, but before describing the excavations there I should like to say how greatly indebted I am to Mr. Hargreaves, the Officiating Superintendent, Northern Circle, for the valuable help he gave me in organising the labour and in supervising much of the work on this particular part of the site. Indeed, without the assistance of Mr. Hargreaves and of Maulvi Wasi-ud-din, the acting Superintendent on the North-West Frontier, it would have been quite impossible for me to carry out digging over such an extensive area.

In attacking the excavation of a city like Sir Kap, I always believe in cutting right through its centre, and accordingly I drew a long trench north and south from the middle of the north wall towards Hathial. This trench, as it happened, coincided almost exactly with the line of one of the main streets—perhaps the High Street of the town—and on the east side of the street we started to excavate various buildings, of which I shall describe only three. Two of these (A and B) are of the Saka epoch and built of the characteristic rubble masonry. In each case, only a strip of the building has been cleared along the side of the street, and it is useless at this stage to guess at their complete plan. All that I can say, at present, is that they appear too large for ordinary private houses, while, on the other hand, their plans, so far as they have been recovered, are unlike those of any monasteries that we know of, though the presence of a courtyard with a *stūpa* in each certainly suggests a religious use. Possibly, they may turn out to be colleges or other public buildings with private *stūpa* shrines attached. The chambers of these buildings are not provided with doorways, the fact being that they are really basement chambers or *tahkhanas* entered from above. In this connexion, there is a passage in the life of Apollonius, which is worth quoting. He is said to have visited Taxila about 50 A.D. during the Parthian period, and describes the houses thus: "From the streets, the houses seemed of only one storey, but they all had an underground floor." The shrines in these buildings are quite unique. They consisted of square bases ornamented with pilasters and other decorative features, and surmounted by a dome with the usual umbrellas above. The base was ascended by a flight of steps and at its corners were round pillars of stone and stucco surmounted by lions standing on Persepolitan capitals, while round the outer edge of the base ran a low railing of the familiar type. A good idea of the appearance of these *stūpas*, when they were intact, may be obtained from a relief of the Mathura school carved on an *ayagapatta* slab which was dedicated by a lady named Amohini. The upper parts of the shrines have now

fallen, but the bases are well preserved and the columns, railings and umbrellas were all found lying about the courtyards. The decoration of the front of the large shrine is well worth notice for the combination it presents of Indian and Hellenistic features (Plate X, *b*). The basis of the design is plainly classical, as can be seen from its general proportions and from the mouldings, Corinthian pilasters, and other features; but Indian details are found in the *torana* gateways, in the niches with curvilinear roofs and in the brackets above the Corinthian capitals. Another feature of interest is the double-headed eagle over one of the niches. This motif occurs, so far as I know, for the first time in a Hittite sculpture from Western Asia, and it appears also in an early ivory from Sparta, but it seems to be particularly associated with the Scythians, who may have been responsible for its introduction at Taxila. At a much later date it was adopted in the Imperial Arms of Russia and Germany.

The date of these two shrines and of the buildings to which they belong is fixed by the discovery in the smaller shrine of a stone relic casket, enclosing one of gold and a number of precious stones, together with six coins of Azes I, of two different types, which leave no doubt that the shrine was erected during his reign—that is, about 50 B.C. The larger shrine is approximately of the same date, though possibly a little earlier.

The third building (C) is a very massive structure built of diaper masonry, probably during the reign of Kujula Kadphises. It is a noticeable but not unnatural phenomenon in ancient towns that, as the debris accumulated from generation to generation, the level of the houses at the sides of the streets rose higher and higher, but the streets themselves, kept free of debris, were often maintained at the same level for several centuries. So here, the floor level of the building is some five feet above the roadway, access to the interior being provided by means of two flights of steps rising parallel with the street (Plate X, *a*). In a building immediately to the north of this and at the same level was found a small well preserved *stūpa*, decorated with a bold stucco design of acanthus leaves. It had fallen bodily on its side and, strangely enough, the masonry had held together, notwithstanding that, like all these early buildings, it was wholly devoid of mortar or clamps between the courses. Below the building C, I found another edifice of the Scytho-Parthian period, over the ruins of which it has been built, and among the antiquities in one of the rooms I came upon an ivory pendent of Hellenistic workmanship with a philosopher's head carved on each side of it. In a still lower stratum were the remains of yet an earlier building, which I assign to the 2nd century B.C., that is, to the time of the Indo-Greek kings. Beneath this, the diggers came upon virgin soil. Thus, on this particular site, there are three distinct strata of buildings—the 1st belonging to the Greek period, the 2nd to the Scytho-Parthian and the 3rd to about the beginning of the Kushan era. At other spots also in Sir Kap I found earlier remains beneath the Scytho-Parthian stratum, and I have little hesitation in saying that the city of Sir Kap was first founded during the Greek period and occupied by the Saka and Pahlava kings and by Kujula and Vima Kadphises. Afterwards, the capital seems to have been transferred to Sir Sukh, where large numbers of coins of Kanishka are said to be turned up by the peasants; and the

site of Sir Kap was then probably given up to monastic buildings. In the one trench which I dug through Sir Kap, I recovered more than six hundred coins, ranging from the time of Agathokles to that of Vima Kadphises. The kings most frequently represented were the following:—Apollodotos, 10 specimens; Maues, 14; Azes, 210; Gondophares, 32; Kadphises and Hermæus, 126; and local Taxilan, 22. Coins were also found of the Greek kings: Agathokles, Heliokles, Lysias, Menander, Philoxenos, and Hippostratos; of the Scytho-Parthian: Vonones, Azilises and Abdagases; and of the Kushan: Vima Kadphises. The fact that not a single coin of Kanishka, Huvishka or their successors was found, proves conclusively, I think, that the site was abandoned as a city before their time, and it proves also that Kanishka must have reigned after Vima Kadphises, not in the 1st century B.C. The only coins found below the floor-levels of the Parthian buildings were those of Lysias, Apollodotos, Maues and Azes I, a few of whose coins were associated with the foundations of the buildings erected in his reign. The coins of Gondophares and of Kujula Kadphises and Hermæus were all found in the debris which formed after the Scytho-Parthian buildings began to fall to decay; those of Hermæus and Kadphises being for the most part near the surface.

Two other finds of interest from the Parthian stratum, were an iron helmet with cheek pieces attached with pivots, a collection of 32 bronze vases, and a set of spoons and other utensils used by Brahmans for ceremonial purposes.

Outside the northern gate of the city of Sir Kap and about a quarter of a mile **Jhandiala.** beyond the outworks of the old city, known as Kachha Kot, are two lofty and very conspicuous mounds, between which the old road to the north appears to have run. In the one to the east I found the remains of a very imposing temple, unlike anything hithereto known in India (Plate XI, *b*). It measures approximately 150 feet long by 80 feet wide, and so far as it has been excavated, bears a close resemblance to a classical temple, the outer peristyle being replaced by a solid wall pierced with windows. The walls of this temple are built of diaper masonry, the mouldings at their base, which are quite classical in form, being executed in *kankar* and the whole covered with thick stucco. The Ionic columns and pilasters in front of the temple are of hard limestone, and of very massive proportions. When the back wall of the cella was excavated, it was found that the old doorway in the centre of it had been built up with masonry, but that the filling had not been carried down to the original floor. The reason of this is that the temple was burnt down, and a foot or more of charred timber from the roof was deposited on the floor; and, when the temple came to be repaired, this debris was left where it fell, and another floor laid over the top. It is in such deposits, resulting from the burning of a building, that we often get our richest finds of seals, terracottas, coins or other objects which are not seriously injured by heat.

Another half mile still further to the north I cleared two other smaller mounds and found that each concealed the remains of a fair sized *stūpa* of the Scytho-Parthian epoch, similar to the square *stūpas* in Sir Kap. The larger one of these *stūpas* was the most interesting, as it was surrounded by monastic buildings (Plate

XI, *a*). By the close of the 1st century A.D., the debris in the courtyard must have risen to a height of nearly two feet, for in it I discovered a collection of coins of the nameless king "Soter Megas", who is believed to have been approximately contemporary with Vima-Kadphises. Later on, when the Scytho-Parthian *stūpa* had fallen to decay, another *stūpa* was erected over its remains. This second *stūpa* is circular in plan and built of the semi-diaper, semi-ashlar masonry which came into fashion in the 3rd century. I may mention that this *stūpa* was explored (as exploration went in those days) by General Cunningham, who penetrated only as far as the round *stūpa* of the 3rd century and proceeded to identify it with a *stūpa* erected by Asoka, more than five hundred years before that date, on the spot where Buddha made an offering of his head. In the spoil earth, thrown out from the *stūpa* by the previous explorer, I found a small silver casket enclosing one of gold, with a relic bone inside.

Bir Mound.

At the Bir Mound my excavations were very limited, being carried out mainly for the purpose of satisfying myself as to whether any remains existed in the compound of my bungalow, before I planted out a small garden there. I found that this part of the hill-top was covered with the remains of a building of rough rubble stone, of which the remnants of a few chambers only could be traced. In one of these chambers, however, I found a small treasure in the shape of 160 punch-marked coins of debased silver, a very fine gold coin of Diodotos struck in the name of Antiochos II of Syria, a gold bangle and several other pieces of gold or silver jewellery, besides a large number of pearls, amethysts, garnets, corals and other stones. A gold pendent in the form of a tiger claw and a little reliquary of silver are especially beautiful examples of metal work, the filigree design applied to their surface being remarkably delicate and refined (Plate XII, *d*). The coin of Antiochos Theos as well as the local punch-marked coins point to about 250 B.C. as the time when this jewellery was hidden in the ground, and the gold claw and reliquary, which are more worn than the other pieces, are perhaps half a century earlier. By the side of the jewellery I found what appears to be a goldsmith's crucible with a few early Brahmi characters stamped on its sides, and in another chamber, a narrow well filled with earthen-ware jars, all of which were turned upside down and empty. I excavated the well down to a depth of some 18 feet and recovered about 50 vases. All these remains belong to the period of the Mauryan occupation of Taxila, and it is safe to conclude that the Bir Mound represents the city of that period.

To sum up the results of these investigations. First, I have settled, generally, the disposition of the site; have determined the ages of the several settlements in the city of Sir Kap; and have found that the settlements on the Bir Mound are anterior to them. Secondly, I have recovered a number of monuments of the Scytho-Parthian and Kushana epochs, and by fixing their relative dates have established a series of much needed land-marks in the history of architectural development. The prevailing spirit of the Scytho-Parthian architecture has been found to be Hellenistic—the Indian elements being subsidiary; and this architecture leaves no room for doubt that the Sakas and Pahlavas played a prominent part in the diffusion of classical ideas in India—a fact which has an intimate bearing on the evolution of early Indian art.

Moreover, by correlating other known buildings in the Punjab and Frontier Province with the series of monuments I have discovered at Taxila, it is now possible to determine within narrow limits the age of the former. For example, it is now apparent that the remains at Tareli belong to the close of the 1st century of our era, while the celebrated *stūpa* at Ali Masjid proves to be more modern by two hundred years than was previously supposed. Similarly, the Tope of Manikyala takes its appropriate place among the buildings of the 2nd and 3rd centuries A.D. and the greater part of the remains at Takht-i-Bahi can be shown to belong to a still later period, that is to the late 3rd or early 4th century A.D.

Thirdly, I have secured an abundance of sculptured images, which, like the architectural remains, furnish us with new and valuable data for the chronology of the plastic arts.

Fourthly, I have demonstrated that Buddhism had a strong following at Taxila in the Scytho-Parthian epoch; and consequently the generally accepted opinion that Kanishka was responsible for the hold which Buddhism took upon the north-west of India must be discarded.

Lastly, I have obtained clear, and to my mind conclusive, evidence both from our coins and from our buildings as to the sequence of the Greek, Scytho-Parthian and Kushan dynasties, and I have found that there are no grounds for supposing either that Kanishka intervened in the 1st century before Christ, or that the Saka king Maues was reigning in the 2nd century of our era.

Taxila was not the only ancient site to the exploration of which I gave my personal attention during the past year. From December 14th until March 3rd I was engaged in initiating and carrying out on behalf of H. H. the Begam of Bhopal a systematic scheme of excavation and repair among the famous monuments of Sanchi in Central India. Since their first discovery by General Taylor in 1818, the fate of these Topes has been anything but a happy one. The beauty and unique character of their sculptures was early recognised, and from 1819 onwards appeared various notes, illustrations and monographs, descriptive of the reliefs and architecture, though too often marred by the fanciful ideas or inaccuracies of the authors. Most notable among such works were Cunningham's *Bhilsa Topes*, Fergusson's *Tree and Serpent Worship* and General Maisey's *Sanchi and its remains*. But the widespread interest which the discovery and successive accounts of these Topes excited proved lamentably disastrous to the monuments themselves; for the site quickly became a hunting ground for treasure seekers and amateur archæologists, who in their efforts to probe its hidden secrets or enrich themselves from its spoils, succeeded in half demolishing and doing irreparable harm to most of the structures. The idea of repairing and preserving them for the sake of future generations seems never to have entered anyone's head, and, though in 1869 (as an indirect result of a request by Napoleon III for one of the richly carved gateways) casts of the east gateway were prepared and presented to the principal national museums of Europe, it was not until 1881, when still more havoc had been wrought by the neighbouring villagers or the ravages of the encroaching jungle, that the Government bethought itself of safeguarding the original structures. In that year Major Cole cleared the hill-top of vegetation and filled the great breach in the main

Sanchi.

tope, which earlier explorers had made, and during the two following years he re-erected at the expense of the Imperial Government the fallen gateways on the south and west, as well as the smaller gateway attached to the Third Stupa. No attempt, however, was made either then or since to exhume from their debris the monasteries, temples and other edifices which cover the plateaus round about the Main Stupa, and, except for the repair of the Second Stupa and the erection of a buttress to save the main one from collapsing—operations which were carried out at Lord Curzon's instigation—nothing else had been done to rescue these unrivalled memorials of early Buddhism from decay, or to protect from damage the hundreds of loose sculptures and inscriptions lying around the site.

This is the enterprising and laudable task which the Bhopal Darbar has now taken up and the execution of which Her Highness has placed in my hands. My first step on starting the work in December was to clear the whole area of the heavy jungle in which it was enveloped; my next, to excavate the ground to the east and south-east of the Great Stupa, where a deep accumulation of soil lay over the natural rock and where I had reason to hope that substantial remains might lie buried. These operations quickly yielded fruit, and I had the gratification of discovering that the whole of the area was occupied by the remains of temples, monasteries and *stūpas*. The extent and character of these is indicated on the plan on Plate VI, where the newly excavated structures are indicated in red; those previously above ground in black. Among the former I shall notice only those to which an exceptional interest attaches, and, first and foremost, the temple numbered 22 on the plan. As it stands, this edifice consists of a lofty rectangular plinth or podium, 86′ 10″ by 54′ 9″, on which stand five rows of broken stone columns. The plinth, which is built of more solid masonry than that of the Great Stupa, stands to a height of about 11 feet above the natural rock, access to it being provided by two flights of steps on the east and west sides. Originally, however, the temple was not rectangular but apsidal in form. This is obvious from the foundations of the plinth, the outer wall of which was rounded on its interior face at the southern end, while inside and parallel to it was a second wall, intended for the support of a row of columns. No doubt, therefore, the temple resembled in appearance the great rock *chaitya* halls at Bhaja, and other places in Western India, but with this noticeable difference, that instead of one entrance opposite the apse, there was an entrance in each of the longer sides—a feature which recalls to mind the Sudama and other Mauryan cave shrines in the Barabar Hills. That the superstructure was mainly of wood and had been burnt to the ground is apparent from the fact that no vestige whatever of it remained except the charred remains of timber which I found on the pounded clay floor. Of the approximate date at which this conflagration took place some indication is afforded by the age of the stone pillars which were subsequently erected on the same plinth. These pillars are ranged in five rows without reference to the plan of the older foundation, and it is reasonable, therefore, to conclude that the original plan had been forgotten when the later edifice was erected. But as the pillars referred to bear records carved upon them in the early Brahmi character, they can hardly be assigned to a later epoch

than the beginning of the Christian era, and it may be presumed, therefore, that the earlier apsidal temple dates back to the Mauryan or Sunga era.

Except where the foundations of the later stone pillars happened to coincide with the earlier walls, they are far from stable, consisting only of a few stone slabs of varying thickness with earth and debris between, the whole laid to a depth of not more than 3 feet below the base of the pillars, with the result that many of the latter have sunk below their original level. A curious feature of these columns is that the tops as well as the bases of their shafts are left rough dressed and, inasmuch as no remains of capitals or architraves have been found, the conclusion must be drawn either that the hall was left unfinished or that the whole of the superstructure was of wood. The second alternative appears the more probable.

On the eastern and southern sides of this building were a range of smaller square columns also inscribed with early Brahmi records, which were inserted in their present place during the Gupta epoch when the steps and walls on the east side of the hall were also constructed.

The principle of constructing a lofty stone basement as a support for a wooden superstructure which is exemplified in this *chaitya* hall, appears to have been followed in the case of other buildings at Sanchi and elsewhere. Thus, near the south-west corner of the enclave I found that the mound supposed by Cunningham to mark the remains of a *stūpa* masked, in reality, a massively built plinth of the same type but square in plan and approached by an inclined stairway on the east side; and another example of the same method of construction was brought to light by me when examining the later apsidal temple immediately to the south of the main *stupa* (Plan, No. 18).

The exploration of the latter building was particularly instructive. In front of the porch of the temple the natural rock was cut away to form a semicircular (moonstone) step, but from this point towards the south the rock slopes rapidly away and during the Mauryan epoch a level terrace was obtained by constructing high retaining walls on the south, east and west sides and by levelling up the interior with stone debris in precisely the same manner as around the Great Stupa. That there was a building on this terrace in Mauryan times is proved by the presence of a floor of clay and lime plaster—materials which, at that date, were used only for the interior of buildings in contradistinction to *bajri*, which was employed where there was no roof to protect it; but whether this building was another apsidal *chaitya* hall or not, could not be determined owing to the presence of the later temple erected above the terrace. The floor of lime plaster on clay, to which I refer, was found at a depth of about 5 feet inside the shrine of the mediæval temple, and consists of 6 inches of clay thinly coated with plaster and laid immediately over the stone debris of which the terrace is formed. Above the Mauryan floor was an accumulation of debris about 1 foot deep consisting of earth and stones above and of burnt brick and plaster mixed with charcoal below, which appears to represent all that is left of the earliest superstructure. Then came a second floor of pounded clay, also partly burnt, about $1\frac{1}{2}''$ to $2''$ in thickness, covered in turn with another layer of debris, and then a third floor of *pakka* concrete laid on a foundation of *bajri* and overspread with a thin coating of *bajri* and lime. This third floor is about 8 inches below the stone floor of the standing mediæval temple and extends as far as its outer apsidal wall, the inner wall and colonnade

having been subsequently erected above it. Thus, there are four clear and well defined strata indicative of the four occasions on which this structure was built and rebuilt: first, during the Mauryan epoch; secondly, during the Andhra rule; thirdly, in early Gupta days, and, lastly, in the 6th-7th century A.D. The date of the final rebuilding I judge from the design of the square pillars, which are similar to those in the temple at Mukandarra and other edifices of that age. In spite of their great height and slender proportions, these pillars were not imbedded in their foundations, but depended for their stability mainly upon the architraves and roof beams which connected them together. It is no wonder, therefore, that, since the destruction of the roof, a number of them have fallen. That the inner wall of the apse was carried up to the full height of the columns there can be no question; for at the point where the southernmost pillar on each side was intended to abut on to this wall its surface has been left rough dressed.

The group of *stūpas* (Nos. 6, 26, 27, 28 and 29) to the east of this apsidal temple and No. 7 to its west, demand but brief description; for they all date from the late Gupta period and follow approximately the same design, though No. 6 was subsequently enlarged and modified. Each and every one of the *stūpas* of this date is constructed on the same principle, with a core of rubble surrounded by a wall of rough ashlar masonry, the courses of which are considerably smaller than in the earlier buildings. In No. 29, which is situated nearest the Great Stupa, I unearthed the inscribed but broken pedestal of a Kushan image of Muttra sandstone, illustrated in Plate VIII, *b*. In No. 28, again, I found another statue (Plate VIII, *d*) of early Gupta date, not in the debris, as in the last mentioned *stūpa*, but set up against the west wall of the relic chamber and with another wall in front of its face to protect it from harm. As the statue had been damaged before it was inhumed in the *stūpa*, we may feel fairly certain that the latter was not erected until the 5th century A.D. or later. The burial of older cult statues, whole or fragmentary, in Buddhist *stūpas* is a practice which appears to have been common during the Gupta period, for I have found it evidenced not only at Sanchi but also at Sarnath and Saheth-Maheth. Stupa No. 7 was also erected during the Gupta epoch and like No. 6 enlarged at a later date.

Another monument of interest belonging to the same time is one of a group of *stūpas* in front of the temple No. 31. In it I found a small bone relic deposited together with the remains of a broken terracotta vase in an earthenware cup, the top of which was closed by a second cup inverted above it. The fabric of the broken vase was of a kind manufactured during the Sunga and Mauryan periods, and there is reason to suppose, therefore, that the relic had been taken from some earlier memorial and deposited in this *stūpa* along with the fragments of the casket in which it had been originally enshrined.

The paved area on this side of the Great Stupa, which dates from the second century B. C., appears to have extended originally for a considerable distance towards the east, and then, at the point where the rocky surface of the hill begins to rise, to have given place to monastic buildings. At a depth of 16 feet I found the stone slabs of the pavement still continuing beneath the north-west bastion of building No. 19, and a little further on, in the centre of the same building and again beneath

the courtyard of the monastery No. 20, I discovered remains of old brick monasteries dating back to the Gupta and previous epochs. As the earlier edifices in this part of the enclave fell to ruin, their places were taken by other monasteries reared on their debris, which in their turn suffered the same fate; and so the process of accumulation went on until the late mediæval period, when the debris had risen to a height of some 14 feet above the old stone pavement, and a retaining wall then had to be constructed around this part of the site to confine it in its place. On the plateau thus formed my excavations revealed two extensive structures erected during the later days of Buddhism, when it is evident, from buildings both here and at other centres of Buddhism, that there must have been a remarkable outburst of religious fervour—the last great effort of Buddhism before its final eclipse. Of these two edifices, the one to the south (No. 19) consists of a spacious court of cruciform shape with round bastions at the corners. The walls between these bastions, which are constructed of architectural members taken from other buildings, rise at their highest point about 4 feet above the old level of the court, but were once, no doubt, more lofty. No trace now remains of any edifice within this court, and it is uncertain whether any ever existed here, though from the resemblance of its plan to that of the Great Stupa of Kanishka at Peshawar, it seems not unlikely that the building may have served as the base of a *stūpa* or of some shrine.

The other edifice, No. 20 (Plate VII, *c*) was a residential monastery of somewhat unusual plan. The main part of the building consisted of a spacious court flanked on three sides by colonnades, with chambers behind them on the north and south. On the fourth—that is, the east—side was a smaller court, also flanked on three sides by cells and connected with the larger court by a doorway which gave access to the northern colonnade of the latter. That this smaller court on the east is of the same date as the rest of the monastery is evident from the similarity of its well cut masonry and of the bonding of the walls at the point of juncture. On the other hand, there appear to have been several later additions in the larger court: notably, the open verandah in front of the chambers on the south and the wall which was subsequently erected to close in the colonnade on the west.

Apart from the valuable results achieved by the discovery and excavation of these remains, my explorations were fruitful also in the light they have thrown on the history and design of the monuments which were previously standing above ground. Foremost among these is the Great Stupa, which with its massive rail and exquisitely carved *toranas* constitutes the noblest and most perfect memorial of Buddhism in India. It has been commonly supposed that the ground rail around this *stūpa* was contemporary with or a little later than the column set up by Asoka near the south gateway and that the King Satakarni, who erected the south gateway, was identical with the famous monarch of that name, who was ruling over the Andhra dominions in the middle of the second century before our era. As this supposition conflicted not only with what is known of the political history of the early Andhras but of the history of early Indian plastic art, I decided to make a practical examination of the base of the Asoka column and of the railing near by and to see if any evidence could be obtained as to their relative dates. I found that previous to the erection of the column (*circa* B.C. 250) there was no trace of any occupation on

the hill top; that the irregular and sloping surface of the rock had then been brought to a uniform level by throwing ponderous stones into the depressions and covering them over with earth and a 6" layer of *bajri*, and that this floor extended over the whole area in front of the south gate and right up to the Asoka column. Moreover, I found that the bottom of the column rested on the natural rock and that, as usual, it was hammer-dressed to a height of 8 feet; that up to this point it was imbedded in a packing of heavy stones retained in position by massive walls built on a rectangular plan around its base, and that the *bajri* floor referred to above was laid immediately on the top of these walls and packing and met the column at the junction of the rough dressed base with the polished shaft. Thus, there can be no question that this floor was laid immediately after the erection of the pillar. Now let me explain what I found above this floor. First, a layer of debris 4" to 5" in thickness covered by a thin floor of *bajri* in clay; then, about 13" more of debris, and another floor of pounded brick in lime. Above this, another layer of debris 14" to 15" in thickness followed by yet another floor of *bajri* overlaid with lime plaster; then more debris consisting of small stones and mud; and last of all, the stone pavement which was laid at the same time as the ground rail round the *stūpa*. Any one who is familiar with the excavation of Buddhist sites in India will not require to be told that such an accumulation, four feet in depth with three floors intervening could not have been formed in less than a century; in all probability the process lasted longer, but in any case the commencement of this railing cannot be referred to an earlier date than the latter half of the 2nd century B.C. and inasmuch as the pillars, copings and cross bars of this railing were the gift of different devotees, its completion could hardly have been accomplished in less than half a century. Then came the construction of other railings flanking the steps and protecting the berm; and last of all the erection of the gateways, which must, accordingly, be referred to a date not later than the latter half of the 1st century B.C.

To return, however, to the Great Stupa. The stairways, by which the berm or raised *pradakshina* was ascended, have been portrayed by Maisey, Cunningham and Fergusson without any flanking rail, and the berm itself with only a low stone kerb on its outer edge. In both cases their restorations are incorrect, for buried or scattered about in various parts of the site I found the original rails both of the stairway and of the berm. A section of the former is illustrated in Plate VII, fig. *a*. In connexion with the stairway rail a curious mistake was made by General Maisey and other writers. If the stepped kerb shown in Plate VII, *a*, is turned upside down, it will be found to present, roughly, the appearance of a battlement, and accordingly, without regard to the dressing of their surface or to the inscriptions carved upon them, the stones of this kerb were inverted and restored at the top of the *hti!* As to the rounded kerb shown in Maisey's and Cunningham's drawings at the edge of the berm, it is in reality the coping of a rail[1]—a fact which might easily have been detected, had the trouble been taken to turn it over and observe the socket holes underneath. Another error has been made by the same writers with regard to the rail and *hti* on the top of the *stūpa*. The only railing of which any remains are known to have been found on

[1] Namely the rail which stood on the top of the *stūpa* around the *hti*.

the summit of the monument, is one of which the uprights had a measurement of 6′ 6″ above their base. These uprights were restored by Generals Cunningham and Maisey as a part of the *hti* and actually built into its sides. As a fact, however, they stood free, surmounted by a rounded coping and arranged in a large square 21′ 6″ along each side, their number being, not as supposed 16, but 28. This square railing, therefore, should take the place of the low circular rail depicted in General Maisey's elevation, while the latter must be eliminated from the top platform altogether and transferred to the berm. The plain and massive square rail on the summit appears, like the large ground rail, to have been added when the *stūpa* was enlarged to its present dimensions in the second century B.C., while the stair and berm rails which are decorated with reliefs are of later date, and the gateways still more modern. Of the earlier brick *stūpa* of Asoka some interesting relics appear to survive in some pieces of umbrellas which I found round about the *stūpa* and the Mauryan date of which is conclusively established by the material (Chunar sandstone) of which they are made, by the exquisite precision with which they are chiselled, and by the brilliancy of their polish (Plate VIII, *a*).

Thus, nearly every feature of the Great Stupa can now be confidently reconstructed. The same is true also of the second and third *stūpas*, around both of which I unearthed the railings of the stairway, berm and summit, together with the umbrellas which crowned their *htis*. In the case of the third *stūpa* two of the stairway posts are in position, and part of the berm rail, a specimen of which is illustrated in Plate VII, *b*, was lying just as it had fallen below the berm.

Among other monuments on which my explorations threw new light are the column near the north gateway of the Great Stupa and the temple to the north-east of it, No. 31 in the plan. As regards the former, I need only remark that my examination of its base, which is square in section and wedged beneath with iron chisels,[1] entirely confirmed the conclusion I had already drawn from the capital and shaft: namely, that the column was erected in early Gupta days and not, as usually supposed, by Asoka. It thus turns out to be contemporary with the statue which is said to have crowned its summit and which is clearly a product of Gupta art.[2]

The results obtained by clearing away the debris from the shrine No. 31 are to some extent apparent in the photograph reproduced on Plate VII, *d*. The shrine now proves to have been built in the 5th or 6th century on a high plinth approached by a flight of steps on the South, but the original superstructure was rebuilt some centuries later, only two columns and the plinth on which the cult statue rested being preserved from the earlier structure. The statue now set up in the shrine was not intended for its present position and was perhaps brought from elsewhere at the time of the reconstruction.

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[1] The analysis of these chisels for which I am indebted to Sir Robert Hadfield, F.R.S., yields approximately the same results as that of the Iron pillar at the Qutb, namely:—

C	Si	S	P	Mn.
·15	·09	·009	·303	09.

[2] Another statue which is said to have surmounted a pillar at Sanchi is now in the South Kensington Museum. This one also is manifestly of Gupta date, though it has been published as Mauryan. *Vide* Vincent Smith, ***History of Fine Art in India and Ceylon***, p. 64.

Another feature of my operations at Sanchi has been the systematic survey of the site and of its individual monuments, as well as the preparation of mechanical estampages of all the records carved upon them. The survey drawings include a contoured map of the whole site, a plan of the enclave and buildings, and plans elevations and sections of all the more important individual monuments. Of the inscriptions on this site 580 had previously been published by Cunningham, Bühler or Lüders, but without any mechanical reproductions or plans to indicate the position in which they occur. To this number I have now added over 300 new records, partly from the buildings which were previously known, partly from those which I have myself excavated. The whole series, when published in conjunction with the structures to which they relate, should constitute a valuable addition to the materials available for the study of early Indian epigraphy. The results of these investigations are to be published, as soon as they are complete, in a special monograph of folio size, which will be issued both in English and in French and which will include more than a hundred photographure plates illustrating the whole series of these remarkable monuments together with detailed dissertations on their epigraphy and iconography from the pens of the distinguished French savants, MM. E. Senart and A. Foucher. For this publication no less than for the exploration of the monuments, the generosity of Her Highness the Begam of Bhopal is responsible, and it is hardly necessary to say that the monograph is likely to be all that artistic illustration and high quality printing can make it.

Pataliputra. Of the explorations at Pataliputra, which Mr. Ratan Tata is so generously financing, Dr. Spooner reports as follows :—

At the Kumrahar site, on which attention has been mainly concentrated, we have succeeded in definitely locating a vast pillared hall of Mauryan date (3rd century B.C.). Dr. Waddell had inferred from the fragments disclosed by his operations at Kumrahar that this particular tract marked the spot where stood the column of Asoka, designated the "Nili" column by Hiuen Thsang. But it very soon became apparent in the course of our work that such polished stone fragments as we met with could not all have formed part of a single pillar. A building of some sort had to be predicated, but its nature and original position were not easy to determine. The discovery of three piles of stone fragments in one straight line at distances of fifteen feet from centre to centre finally gave us our clue to the whole. Trial pits dug at similar distances in all directions disclosed other similar piles of pillar fragments and the existence at the site of a large pillared hall was established. This discovery was made on the 7th of February, just one month after the inception of the work, and the rest of the season was devoted to tracing the extent of the building and to recovering its ground plan as far as time allowed. The result up to date is the location of 8 rows of 10 columns each, the columns being all 15 feet apart. But it is probable that this is not the full extent of the building even yet, and an exact determination of its size is, therefore, impossible until the work can be continued next season. It is, however, abundantly clear even now that the hall was one of exceptional magnitude and magnificence, and it is hoped that the recovery of its ground plan will add definitely to our knowledge of early architecture in India.

The columns were polished monoliths, some 3 feet 6 inches in diameter at base, and certainly not less than 20 feet in height. They were made of Chunar sandstone, erected without pedestals or socket holes of any kind, and stood free either on the wooden floor of the hall or on square platforms of logs, laid for the purpose, at intervals. So far as is at present known, there was no attempt at any variation in the position of these columns. They were placed in rows fifteen feet apart, at distances of fifteen feet within the rows, the alignment being east and west. The resulting ground plan thus exhibits a pronounced similarity in essential features with the famous hall of a hundred columns at Persepolis, and this together with certain other established points of similarity would seem at present to indicate a probable connection between the two. The columns within the body of the hall appear to have borne surrounding girdles cut in the actual monolith at a point some five feet above the base, and attached to the main shaft by means of four projections from it, one on each side of the column. The pillars along the edges of the hall seem not to have had these encircling girdles, and may, moreover, have been themselves of smaller diameter than the others, but the point has not been finally established.

Just south of the eighth or southern row of columns in the pillared hall was a remarkable series of long wooden platforms. These measure 30′ × 6′ × 4½′ in height, and are composed of 30 feet *sal* logs in wonderful preservation (Plate V, *b*). The platforms are seven in all, so far as is at present known, but in all probability the number will be augmented as soon as we can examine the area immediately to the west of the known series. It would be out of place here to enter upon either a detailed description of these singular structures, or a discussion in detail of the problems they raise. Their purpose is wholly undetermined up to the moment of writing, and must, I fear, remain so until their complete number is known as well as their relation to the pillared hall. The most probable explanation that has yet been suggested for them is that they were mere foundations for one or, more probably, two specially large and heavy columns each. But whatever they were, whether foundations or pre-Asokan altars, or, as the general public appears to think, landing stages for pleasure barges in some Venetian garden of the Mauryan palace (a theory which to my mind has nothing whatever to recommend it beyond the curious fact that it seems to have appealed to the great majority of visitors), these massive platforms as they lie there, 20 feet and more below the modern surface, are remarkable and impressive monuments. They seem invested with a singular solemnity, and suffice to impress the beholder with a truer idea of the magnitude of the ancient building than is to be gained anywhere else in the area as yet excavated.

The superstructure of this building appears to have been composed of heavy logs of *sal* wood, resting directly on the columns without the intervention of stone capitals, and held in position by heavy round bars or bolts of metal, presumably copper, which penetrated the stone columns at top to a depth of nearly one foot. The timbers themselves were fastened together by large and massive nails of iron, six to eight inches or more in length. The plinth and floor were of wood, the level of the latter being in general some 17 feet below the modern surface of the soil. The floor level must, of course, have risen at least a little above the

level of the surrounding ground, and there were presumably steps giving access to this floor on one or more sides; but these are points which as yet await determination. However this may have been, the hall as sketched above must have been a singularly vast and stately structure, the dignity and solemnity of which can be most readily appreciated by comparing the interior of the similar structure at Persepolis as shown in Plate IX of Part III of Dieulafoy's great work *l'Art Antique de la Perse*. That the building remained in use for some centuries, is clear from the existence of at least one large and inferentially elaborate Bodhisattva statue from Mathura, which is to be assigned most probably to about the dawn of the Christian era or a little later. Then, at a point of time which cannot be determined with accuracy, but which may be put down provisionally as in the early Gupta epoch, the building, standing as it was, was flooded. How long this flood continued it is impossible to say. It may not have been very long, but it sufficed to drop some eight or nine feet of silt all over the level of the floor. In the course of this silting process, however, and at a time when some three feet only or about one-third of the total deposit had been dropped, one at least of the monolithic columns, being apparently weakened in its foundations by the flood, fell over and dropped to a semi-reclining position, with the upper end of its broken shaft as near the floor as the then accumulated silt allowed it to fall, but still some three feet or more above it. The rest of the columns remained in an upright position and continued to support the partially ruined superstructure for an indefinite period. Indeed, it is possible that the building again came into restricted use after the subsidence of the flood, the top of the silt in this case having then done duty as a floor. This would explain a good deal that is otherwise puzzling at the site, and would seem to be probably true, although I do not know that it can as yet be said to be established. But, however that may have been, the final destruction of the building was due to a fire which was certainly subsequent to the flood, and which appears to have taken place about the 5th century. This fire must have been a great conflagration, for it almost totally consumed the entire wooden superstructure of the building and deposited a solid layer of ashes of considerable thickness over the whole area which the roof had originally covered. At the same time its heat led to the expansion of the copper bolts which served to affix the timbers to the stone columns, and as these bolts were deeply sunk in the latter, their expansion sufficed to split these columns into innumerable fragments which dropped to the nearest point of the surface to their original position. Notice, however, that it was only the upper halves of these columns which were exposed to the fury of the fire. The lower eight or nine feet of the shafts were, of course, buried in the enveloping silt and were in this way both saved from breakage and held in an upright position. After the fire, therefore, the appearance of the site must have been merely that of a field of ashes, with mounds or heaps of ash and broken stone fragments at intervals of fifteen feet, or piled about the buried and still standing stumps of the pillars underground. Of course, it must have been inevitable that some, if not all, of these stumps projected their broken upper ends above the accumulated debris at that time, for it is inconceivable that the fire should have broken them all off uniformly flush with the then surface of the ground. These projecting stumps evidently interfered with the further utilization of the site, and, as this was almost immediately desired, the stumps appear

to have been forcibly broken off by the next comers and the ground levelled for further use. Some of the pieces so broken off, or other *disjecta membra*, were furthermore broken into smaller fragments or chips and utilized by the new builders in laying a very rough pavement over a portion of the site. The rest of the tract was covered with brick buildings wherein none of the old stones were used and the occupation of the site continued. All this took place in Imperial Gupta times, and at only the shortest of intervals subsequent to the fire. We may date the occurrence with some confidence in either the 5th or the 6th century.

Later on, the wooden floor, on which the upright columns rested, decayed, and at the same time the level of the subsoil water rose. Thus, not only were these columns deprived of their natural support, but the soil directly underneath them was rendered too soft to offer any real resistance. Consequently they began to sink. At first, when their whole length was imbedded in the relatively dry silt above the subsoil water, this clay must have exerted considerable pressure of friction along their shafts or sides and their downward progress must have been slow. But the pressure decreased as more and more of the shaft passed down into the saturated and comparatively unresisting subsoil, until it finally ceased altogether, as the top of the vertical shaft sank below the level of the original floor. As regards the Gupta buildings, the consequences in most cases were fatal. As the upright columns sank, they left vertical circular holes in the dry silt between the original Mauryan floor and the stratum of ashes just below the Gupta buildings. As the silt exerted no sufficient lateral thrust to fill these cavities from the sides, they naturally filled from above. That is to say, the ashes and stone fragments which had lain piled over and around the top of each upright shaft just after the fire, proceeded to sink down into the round hole left by the descending column, and along with them went also the brick walls built by the Guptas whenever these happened to cross one of the vertical shafts. The result was of course the ruin of the Gupta structures and seemingly the final abandonment of the site, until modern Muhammadan times at any rate.

Masrur.

The rock-cut temples at Masrur, which are illustrated in Plate XIII, are not entirely new discoveries. In the list of monuments in the Punjab prepared in 1875 the main temple is referred to in the following words :—" 24. Thakurdwara temple in the village of Masrur, Tahsil Dehra. In good preservation. Not photographed Said to have been built in the time of giants," and it is noticed just as briefly in the revised list of 1891. But in neither of these publications is there any indication of the great interest which attaches to it or to the subsidiary shrines as models of structural temples of the Northern style and the only examples of their kind which are known to exist in Northern India ; moreover, no mention whatever is made of the temple either in the *Settlement Reports* or in the *District Gazetteer* of 1904. The village of Masrur is situated about 8 miles, as the crow flies, W.-S.-W. of Kangra, and the temples referred to are hewn from an outcrop of rock on a ridge of the hill immediately to the N. E. of it. " The chief temple," writes Mr. Hargreaves, who has recently made a careful survey of the whole group, " is a complex of shrines, the principal one of which is in the centre facing E.-N.-E. Almost in line with this and on either side of it are two subsidiary shrines of decreasing size, the smaller one of which occupies the outer angle, while behind was a similar arrangement of

secondary shrines, so disposed that the principal temple stood in the centre of eight smaller ones, the whole cut in the base of a more or less rectangular mass of rock. Level with the top of the cella of the main shrine the rock is cut as a flat roof broken only by the main spire and the *sikharas* which rise above the sanctum of each of the eight subsidiary shrines. There is, however, a very marked difference between the size of the main tower and those of the surrounding temples, and this disparity has led the architect to insert on either side of the main spire what appears at first sight a *sikhara* of intermediate size, but which is, in reality, a complete shrine with cella and spire.

"Access to the main shrine was through a portico and larger *mandapa*, but of these only traces now remain. On either side of this *mandapa* was a *sikhara* masking a staircase which led from a doorway on the side of the *mandapa* to the flat roof level and the base of the spires. Part of the one to the left still remains, but the corresponding one to the right is apparently completely destroyed, though excavation may reveal its base. To right and left of the portico which stood before the *mandapa* rose a small monolithic shrine, but only fragments exist, namely, part of a spire to the right and portions of a carved panelled doorway on the left.

"The material in which the monuments are excavated is a sandstone of varying fineness and strength. In some places it is so hard and well preserved that the ornamentation might but yesterday have left the master's hand, while the adjoining portions have so weathered as to preserve scarcely anything but the faintest outlines. This unevenness of texture and its liability to fracture must constantly have hindered the progress of the work, and in more than one place, where the material was so friable as to render its ornamentation impossible, stone of better quality was substituted. Thus the lintel of the shrine on the extreme left of the main temple is an inserted slab and not the original rock. This may account for the fact that only the principal shrine and its *mandapa* and portico were completely excavated, though some progress had been made in the clearing of the verandah which connects the corner shrine, while several doorways show that the original intention was more ambitious than the actual achievement.

"The date of the monument is unknown. Tradition assigns it, as usual, to the Pandavas, who made it during a night of six months' duration, which so tried the patience of a *telin*, that lighting her lamp she went out to discover the cause and so interrupted the work. For her impatience she was turned to stone and her head is still shown by the *pujari!* The head in question is from one of the sunk medallions adorning the spire! Of inscriptions there are none, unfortunately, to throw light on the question, and our only guide, therefore, is the style of the architecture and of the carvings which adorn it. The monument being a reproduction of structural shrines must necessarily be later than the earliest of structural monuments of similar type, and though the columns are of classical form, the beautiful pot and foliage capitals are of an elaborate type unlikely to have been evolved at any very early date. The monument was most probably excavated about the 8th century A.D.

"The local name of the shrine is Thakurdwara, the sanctuary of Vishnu, and it is so designated on the survey map. At present, three stone images, identified by the *pujari* as Rama, Lakshmana and Sita are enshrined in the main sanctum. These

appear to be but recent introductions, as 26 years ago a small metal image was the object of devotion. Apart from them there is an astonishing lack of images and reliefs, the only iconographical data being that furnished by the carved lintels. That of the main shrine shows nine divine figures with *chauri*-bearing attendants between. The central figure, over whose head a jewelled crown is held by flying *ganas*, is Siva, and the following also are portrayed:—Ganesa, Durga, Vishnu, Indra (?) and Skanda. On the lintel of one of the subsidiary shrines are five deities, Siva again occupying the centre. Over the doorway of another shrine are depicted five four armed female deities or *saktis*, among which Mahesvari, Aindri and Vajra Varahi, are still recognizable. There is thus nothing in the monument itself pointing to its original dedication to Vishnu, and the *Garuda* figure now standing on the broken and displaced *mandapa* column is undoubtedly later and inferior work. The attempt to count the shrines as ten and connect them with the *avataras* of Vishnu fails hopelessly, and, were the cella excavated, it is not improbable that traces of a *linga* would be found."

Mr. Hargreaves, let me add, is contributing a fully illustrated account of this unique group of monuments to the second part of my Report, and to it I must refer the reader who wishes for further details regarding them.

It remains to notice several small finds of interest made in Burma, most **Hmawza.** important of which are some funeral urns unearthed at Hmawza, near Prome. One of these urns, which is of stone, bears a single line inscription in Pyu below the rim; a second has a similar inscription in the same position, and, in addition to it, a record of 16 lines on the bottom of the urn, eight of which are in the ordinary Pyu script and the other eight apparently a translation of the same in archaic Indian characters, though the suspicious repetition of certain letters in groups of two or three suggests that they may have been employed only as a decorative device without any real meaning. A third urn is of terracotta, in a remarkably fine state of preservation, with a record which according to M. Duroiselle, refers to a member of the then reigning Vikrama family. Five such urns in all have now been found and from a preliminary study of the records engraved upon them Mr. C. O. Blagden tentatively suggests the following dates for the death of some of the members of the royal family: —

A.D. 673, relative of King Suriyavikrama died.
A.D. 688, King Suriyavikrama died.
A.D. 694, King Harivikrama died.
A.D. 718, King Sihavikrama died.

Should these dates be confirmed by further research (and they appear to be corroborated, let it be said, by Chinese annals), a very notable advance will have been made in establishing the basis of the local history of this period.

Another find of peculiar interest made at Pagan was a bronze statuette, 1′ 7″ **Pagan.** in height with figures of Ganesa and Gavampati, the patron saint of the Talaings, back to back. "The cult of the latter," says M. Duroiselle, "seems to have been unknown at Pagan previous to the 11th century, but was brought over there by the Talaing captives after the destruction of Thaton, their capital, in 1057 A.D. The inscriptions represent Anawratha, the king of Pagan, as a great devotee of

Gavampati. A peculiarity of this statuette is, that the figures are covering their eyes with their hands. It was used by magicians in working spells, such as making their enemies blind of both eyes, or throwing over them a charm which made them blind to their own advantage. The union, in this representation of Ganesa and Gavampati, of a Hindu god and a great Buddhist saint, is typical of the blending, in Burma, of the popular Hindu and Buddhist superstitions."

Museums and Minor Antiquities.

As usual, a separate report on the working of the Archæological Section of the Indian Museum, Calcutta, has already been submitted by me to the Trustees and is reprinted here in Appendix E. In the Madras Museum, Mr. Rea remained on special duty and has completed the arrangement and labelling of the prehistoric antiquities from Adichhanallur in the Tinnevelly District. A catalogue of these antiquities has also been prepared by him and is shortly to be published. In this connection, it is gratifying to note that the new extensions to the sculpture gallery of the Madras Museum are likely to be ready for occupation at no distant date. The local Museum at Bijapur has now been placed on a sound basis, its manangement being vested in a standing Committee with the Collector of Bijapur as its *ex-officio* President and the Archæological Superintendent, Western Circle, as its Secretary and Honorary Curator. Steady advance has also been made in the development of the archæological collections in the Lahore and Peshawar Museums, and the building of the Prince of Wales' Museum, Bombay, is nearing completion. As regards the Ajmer Museum, the Curator, Pandit Gaurishankar Ojha, has been indefatigable in his efforts to get together a representative collection of Rajput antiquities, but the various States in Rajputana are not supporting it as liberally as was hoped, preferring apparently to start small and independent Museums of their own rather than contribute to the development of a Central Institution. Their action in this respect is not perhaps to be wondered at, but it need hardly be pointed out that such gifts from the Jodhpur and other Darbars as have found their way to the Ajmer Museum are of far more educative value and appreciated by a far larger public than they would be in a smaller and more remote Museum. During the year under review the only Chief who made a gift of sculptures to the Museum was the Rao Raja Sahib of Sikar. This gift was a particularly welcome one, for the sculptures in question are the oldest that the Museum has yet acquired and of great iconographic value.

Fresh Acquisitions.

The acquisitions which have been made for the Indian Museum, Calcutta, are enumerated in Appendix E. Those for the Madras Museum included an inscribed stone dated A.D. 1749, commemorating the laying of the foundation stone of a part of the Dutch Fort of "Oorange" near Chingleput, a brass weight from Tranquebar bearing the crown and monogram of king Christian VII of Denmark, dated 1806, cinerary urns from an old rock-cut tomb near Calicut, five sets of copper-plate grants belonging to the Pandya and Eastern Chalukya dynasties, wood carvings from the temple cars at Tirupati, and a number of very interesting bronze images of Hindu gods and goddesses purchased by me through Mr. Rea and presented to the Museum. Through Major Jacob, Political Agent at Aden, I also purchased a valuable collection of Sabaean antiquities from Arabia and presented them to the Poona Museum. Another series of similar objects was also donated to the same Museum by Captain A. S. Meek, Political Agent of the Gohilwad Prant. For the Agra and Delhi

Museums were secured some further examples of Mughal paintings and a few articles of domestic use which once belonged to the Emperor Bahadur Shah II, while among the additions to the Lahore Museum were clay and papier-mâché models of objects of Lamaistic worship, and a number of copper and brass images from Tibet. To the Peshawar Museum were sent all the Græco-Buddhist sculptures unearthed by Sir Aurel Stein at Sahri-Bahlol, and to the Muttra and Lucknow Museums a number of Buddhist and Jaina images of early date, as well as a copper plate grant of the reign of king Govindachandra of Kanauj, which was presented to the latter institution by the Maharaja of Majhauli, in whose estate it was found. The collections of stone sculptures, plaster and terracotta images, bronzes, gold jewellery, coins and other objects discovered by the Director General at Taxila, were for the time being preserved in a building constructed for the purpose on the spot. Lastly, for the Pagan Museum were acquired the Buddhist relics and images which were discovered in a cave temple at Kyauksaung, and a number of bronze figures and clay tablets which were obtained from the Shwezadi monastery in the Myinkaba village.

Treasure Trove.

Besides the above, numerous acquisitions were made for the various Museums under the Treasure Trove Act. Among these was a collection of 444 silver coins of Shah Alam, minted at Murshidabad, which were found at Keshodi in the Hazaribagh District. Four of these bear the regnal years 6 and 9, which, being rare, have been acquired for the Indian Museum cabinet. At Banka in the Bhagalpur District five gold coins were discovered, of which two belong to the reign of Chandragupta II and two to Kumaragupta II. These latter were also purchased for the Indian Museum. From Kandgaon, Ahmednagar District, came a series of 37 gold coins which bore on the obverse the figure of a goddess and on the reverse a *Nagari* legend, said to contain the name of Shivraj. Another deposit consisting of 240 gold coins, mainly of the Vijayanagar kings Harihara and Achyutaraya, was unearthed in the principality of Jath in the Bijapur District, and a still more important hoard of 233 Roman denarii in a village in the district of Coimbatore. 184 of the latter belong to the reign of Tiberius, the remainder to that of Augustus.

Among Treasure Trove acquisitions other than coins the most valuable was a copper plate grant found at Belabo in the Dacca District. According to Dr. Spooner, this document was issued in the 5th year of the reign of king Bhogavarma of the Yadu race, and records a gift of land by him to a Brahman named Ramadeva Sarma. Its main interest lies in the fact that it establishes for the first time the line of the Varma kings of Bengal. Another find of some value secured by Government was made in the village of Dahisar in the Thana District of Bombay. It comprised a silver waist band and two silver neck ornaments as well as 200 silver coins.

Epigraphy.

For the following accounts of the epigraphical discoveries of the year I am indebted to Mr. Krishna Sastri and Dr. Horovitz :—

" Before his death, the late Government Epigraphist had passed for printing and issue Part VII of Volume X and Parts II and III of Volume XI of the *Epigraphia Indica.* Part VIII of Volume X and Parts IV and V of Volume XI had been left in the stage of page proof; these were passed for issue subsequently by the officiating Epigraphist in the name of Mr. Venkayya. The six parts of the journal thus issued during the year, include many valuable contributions from scholars both

European and Indian. The list of Brahmi inscriptions from the earliest times to about A.D. 400 concluded by Professor H. Lüders of Berlin in Part VII of Volume X and the whole issued as an Appendix to this Volume of the *Epigraphia Indica*, is of the highest importance to students of Pali inscriptions and literature. So also are the new Special Tables for the computation of Hindu dates, contributed by Professor Jacobi, Ph.D., of the Bonn University. These latter provide us with the necessary data, based on the Ârya, Sûrya and Brahma-Siddhântas and the Siddhânta-Śirômaṇi, for testing the approximate results derived from the Professor's General Tables published in *Epigraphia Indica*, Vol. I. Mr. F. E. Pargiter, I.C.S. (Retd.), has issued a scholarly edition of the Kharôshṭhî record on the Wardak Vase which was discovered in the topes of Khawat in Afghanistan in the years 1834-37. It is dated in the reign of the Kushaṇa emperor Huvishka and records that a private individual interred this vase, containing a relic of the Buddha, in a monastery near Khavta (Khawat). The Brâhmî inscription from Jankhat also edited by the same scholar is ascribed by him on palæographical grounds to the latter part of the 3rd century A.D., and he concludes that Svâmin Vîrasêna, in whose reign the record is dated, must be identical with that Vîrasêna whose coins are figured and described both by Professor Rapson and Mr. V. Smith, the latter supposing him to have been a king in the Gangetic Doab about A.D. 300. The Surat plates of king Vyâghrasêna published by Professor Hultzsch, record the important fact that this Traikûṭaka king ruled over the Aparânta country, thus confirming the statement of Kâlidâsa (*Raghuvaṁśa*, IV. 58f) *viz.*, that the mountain Trikûṭa from which the family name must be derived, was placed in the territory of the king of Aparânta. Professor Hultzsch and Dr. Sten Konow have contributed papers on the six Valabhî inscriptions which were discovered 40 years ago in a small under-ground chamber adjoining a tank in Palitânâ. To these may be added another Valabhî grant—the Navalâkhî plates of Śîlâditya published by Professor H. M. Bhadkamkar. It is interesting to note that one of the incomplete records of Palitânâ mentioned above, has been found by Dr. Sten Konow to be the missing first plate of the incomplete Valabhî grant from Wala, published by Dr. Bhandarkar in Volume I, of the *Indian Antiquary*, as early as 1872, *i.e*, at the time when the plates were first unearthed at Palitânâ. The identification of the modern village of Kosam, near Allahabad, with the ancient city of Kauśâmbî, has been clearly proved by both Professor Hultzsch and Mr. Pargiter,—by the former in his article on the "Goharwa plates of Karnadeva" and by the latter in his contribution entitled "two records on the pillar at Kosam." Details of 49 South Indian dates supplied from inscriptions of the Chôḷa and Pâṇḍya kings, have been computed by Professor Jacobi and Mr. Sewell, with the result that the initial years of two new Pâṇḍya kings have been announced. Mr. B. C. Mazumdar and Rai Bahadur Hira Lal have contributed interesting articles on the Sômavaṁśî kings of Cuttack, which add greatly to our knowledge of that dynasty. A complete account of the Châhamânas of Marwar based on a study of their inscriptions, is supplied by Mr. D. R. Bhandarkar. The Paramâra king Bhôjadêva of Dhar is reported in his Banswara plates (published by Professor Hultzsch) to have undertaken an expedition into the Koṅkaṇ in or before A.D. 1020. A valuable contribution to the history of the

Bāṇas comes from the pen of the editor, Rai Bahadur V. Venkayya, in which he gives : (1) a synchronistic table of the three contemporaneous South-Indian dynasties, the Bāṇas, the Pallavas and the Gaṅga-Pallavas, and (2) another similar table of the Western Gaṅgas, the Bāṇas and the Nolambas. Other articles of interest included in the volumes of the *Epigraphia Indica*, are (1) the Narasapatam plates of the Eastern Gaṅga king Vajrahasta III, by Dr. Sten Konow, which register the oldest known grant of that king; (2) the Burmese inscription at Bōdh-Gaya by Mr. Taw Sein Ko; (3) the Tiruveḷḷaṛai inscription of Dantivarman (of about the 9th century A.D.) by Mr. K. V. Subrahmanya Aiyar; and (4) the Dānavulapādu (Jaina) pillar inscription of Śrīvijaya (of about the 10th century A.D.) by Mr. H. Krishna Sastri.

"Dr. Sten Konow of Christiania having accepted the editorship of the *Epigraphia Indica* all papers on hand connected with that journal were transferred to him by the Officiating Epigraphist on 25th March 1913.

"In the Frontier Circle was discovered an interesting Buddha sculpture, on whose pedestal is engraved a Kharōshṭhī inscription of eleven letters of the Kushaṇa type. The find was due to the courtesy of the Rev. J. E. H. Williams, Chaplain of Nowshera, who kindly helped to get impressions of it taken for the Peshawar Museum.

"No Epigraphical discoveries of note were made in the Northern Circle during the year 1912-13. Dr. D. B. Spooner, Superintendent, Eastern Circle, reports only on the Balabo (Belava) copper plate inscription which was brought to his notice by Mr. R. D. Banerji of the Indian Museum. Being a document of exceptional value for the history of the Varma kings of Bengal, Dr. Spooner has recommended to Government the acquisition of this copper plate. A critical edition of the grant will shortly appear in the *Epigraphia Indica* under the authorship of Professor Radhagovinda Basak, Sanskrit College, Rajshahi. The Don Buzurg copper plate grant of the Gahaḍavāla king Gōvindrachandra, noticed by Pandit Daya Ram Sahni in the *Archæological Survey Report* for 1906-07, p. 200, is the only record that has been received in the Lucknow Museum for safe custody during 1912-13.

"In the Western Circle, Mr. D. R. Bhandarkar discovered a copper plate grant at Talegaon (Poona District), which belongs to the time of the Rāshṭrakūṭa king Krishṇa I. It is dated in Śaka 690 corresponding to Wednesday, the 23rd March 768 A.D., and mentions the district Pūnaka from which, according to Mr. Bhandarkar, the modern city of Poona takes its name. Thus we find here a documentary confirmation of what was hitherto a vague belief that Poona must be an ancient town. A fragmentary lithic record discovered at Mandasor and dated in the Vikrama year 481 (A.D. 424-25), belongs to the time of Naravarman. Mr. Bhandarkar says that this can be no other than Naravarman, father of Viśvavarman, mentioned in the latter's inscription found at Gaṅgdhar. The one interesting point that is proved by this record is that the years of what is now known as the Vikrama or the Saṁvat Era, were, in the 4th and 5th centuries, called *Kṛita*.

"In the Burma Circle were copied seven stone inscriptions, of which three are illegible and of the others the earliest is dated A.D. 1269 and the latest A.D. 1732. All these inscriptions record the construction of sacred buildings and the

dedication of land and slaves thereto. The sixth volume of Burma inscriptions transliterated in modern Burmese characters, has also been issued.

"By far the largest number of inscriptions—16 copper plates and 614 stone inscriptions—were copied and examined in the Southern Circle. These include records of various South Indian dynasties:—the Pallavas, Bāṇas, Noḷambas, Western Gaṅgas, Gaṅga Pallavas, Rāshṭrakūṭas, Chōḷas, Pāṇḍyas, Western Chāḷukyas, Hoysaḷas and the Vijayanagara kings. A rock-cut temple of seven cells was discovered near Conjeeveram. It bears a Rāshṭrakūṭa record of the 10th century A.D., though undoubtedly the origin of the temple itself has to be ascribed to a much earlier period. A Pallava-Grantha inscription found on the plinths of two high platforms recently exposed to view by the excavations made under the direction of the Archæological Department, near the "Shore Temple" at Māvalivaram (Seven Pagodas), belongs to the time of the Pallava king Atyantakāma. This king has been identified with Narasiṁhavarman II, the builder of the Rājasiṁhēśvara (the present Kailāsanātha) temple at Conjeeveram.

"The Noḷamba epigraphs copied during the year carry the genealogy of that dynasty three generations further from Dilipa Iriva-Noḷamba. The latest king mentioned is Vīramahēndra-Noḷamba who is stated to have led a campaign into the Chōḷa country. This he must have done as a subordinate of the Rāshṭrakūṭa king, Krishṇa III (A.D. 940 to 961).

"Although the Chōḷa king, Āditya I, was the first to conquer the Toṇḍaimaṇḍalam, its actual consolidation and absorption into the Chōḷa territory must have been achieved by his son and successor Parāntaka I. Two Chōḷa records copied at Tiruvoṟṟiyūr refer to a military officer of Parāntaka, who defeated Śiṭpuli and destroyed the town of Nellore. Śiṭpuli has not been identified, but Nellore is undoubtedly the town of that name which is the capital of the modern Nellore district. Still another record copied in the same temple refers to a visit paid by Uḍaiyār Uttam-Chōḷa-dēva in the 5th year of Madiraikoṇḍa Rājakēsarivarman. This lends support to the identification of the latter king with Gaṇḍarāditya made by the late Rai Bahadur V. Venkayya (*vide* p. 122 of *Archæological Survey Report* for 1908-09). A valuable inscription of the time of the Singhalese king Vijayabāhu I (A.D. 1065-1120) was examined at the instance of Mr. H. C. P. Bell, the Archæological Commissioner of Ceylon. It registers the construction of a tooth-relic shrine called Daḷadāyapperumbaḷḷi in the Abhayagiri-vihāra, and states that the care of this shrine was entrusted to the *Vēḷaikkāras*—a community of labourers of South Indian extraction, which supplied fighting men for some of the regiments of the Chōḷa army during the reigns of Rājarāja I and Rājēndra-Chōḷa I, in the 10th and 11th centuries of the Christian era, when almost the whole of Ceylon was under their sway.

"Of the copper plates examined during the year in the Southern Circle, the most interesting are those from Nīlagunda in the Harpanahaḷḷi tāluka of the Bellary district. They belong to the time of the Western Chāḷukya king Vikramāditya VI and bear dates Ch. V. 12 (A.D. 1087-88) and Ch. V. 48 (A.D. 1123-24). In these years grants were made at the request of the chiefs Palata-Pāṇḍya and his grandson Rāya-Pāṇḍya, respectively, to Brāhmaṇas who had immigrated from

the Dravida-dēśa (*i.e.*, the Tamil country). Palata-Pāṇḍya and Rāya-Pāṇḍya are known to have been chiefs of Uchchaṅgi, subordinate to the Western Chāḷukyas (see Mr. Rice's *Ep. Carn.*, Vol. XI, Introd., p. 18). The Daṇḍapalle copper plates of the time of the Vijayanagara king Vijayarāya (A.D. 1331 to 1344) and the Akkalapūṇḍi grant of the Korukoṇḍa chief Śiṅgaya-Nāyaka, also deserve to be noticed. The former mention the Śaiva teacher Kriyāśakti Dēśika who, we know, was the tutor of Mādhava, one of the famous ministers of Bukka I and Harihara II. Śiṅgaya Nāyaka, of the latter, is probably identical with that Śiṅgappa-Nāyaka for whom the great Vaishṇava teacher Vēdānta-Dēśika (14th century A.D.) wrote the poem *Subhāshitanīvī*.

"In connection with the Vijayanagara kings, has been noted an inscription from Dēvikāpuram which records the death of the Tuḷuva chief Narasā-Nāyaka, the father of the great Kṛishṇarāya, in Śaka 1425, *i.e.*, A.D. 1503-4. The Maṭla chief Tirumalarāja, whose brother Ananta was the author of the Telugu poem *Kākusthavijayamu* was a subordinate of the Karṇāṭa king Tirumala I."

Of Moslem Epigraphy Dr. Horovitz writes :—

"The plan outlined in my last Report of publishing systematically the epigraphical records of the Pre-Mughal rulers of Delhi has been carried out during the year under report as far as the earliest Sultans of Delhi are concerned. All the inscriptions dating from the time of Mu'iffuddīn (better known as Shihābuddīn), Qutbuddīn Aibak and Īltutmish so far known have been collected, arranged in chronological order, and, after a re-examination of the doubtful passages on the spot, have now been published in the original along with an English translation and historical annotations in an article which has been in the press for some time and which, it is hoped, will be issued by the end of 1913 or early in 1914. Some of the more important results, to which a renewed study of these inscriptions (with a few exceptions they have been published before, but mostly in an unsatisfactory manner) has led, may be shortly indicated. **Moslem Epigraphy.**

"1. The much-discussed date of the conquest of Delhi as given in the inscription of the Quwwat-ul-Islam Mosque seems to be 587 and not 589; yet the conquest of Delhi cannot have taken place before 589. In other words, the date given in the inscription is wrong. There are various reasons that render it highly probable, that the inscription was put up long after the event to which it refers had happened and some time after Qutbuddīn Aibak's death.

"2. Regarding the history of the Qutb Minar the evidence of the inscriptions may be thus summarised : the basement storey was built during the governorship of Qutbuddīn Aibak, whilst Mu'iffuddīn was his overlord and the latter ruled in conjunction with his brother Ghiyathuddīn. The second, third and fourth storeys were built by Īltutmish, who later on was considered to be the builder of the whole Minar (although in the inscription over the doorway of the second storey he expressly states that he ordered the completion of the building).

"3. One of the two inscriptions discovered at Palwal by the late Maulvi Muhammad Shu'aib proves that Qutbuddīn Aibak's death cannot have taken place before Shawwal 607 H.; he probably died towards the end of that year. The second inscription from Palwal shows that in Jumādā I, 608 H., Īltutmish was already in possession of the country round Delhi.

"4. The tomb of Mahmud (Iltutmish's eldest son) at Malikpūr is popularly known as Sulṭān Ghārī. For the origin of this name it is of some importance to note that a saint Kamāluddīn 'Abdullāh al-Ghārī used to live not far away from the shrine of Shaikh Nizāmuddīn in Ibn Baṭṭuṭa's time. He was surnamed al-Ghārī because of the ghār (cave) in which he passed his days. It is not unlikely that the epithet of this saint was later on transferred in popular tradition to the Sultan's son, who was buried in the vaulted crypt.

"5. Apart from the epigraphical records of the early rulers of Delhi, those of the kings of Gujarat were also taken in hand during the year under report. M. Zafar Hasan, B.A., has devoted much of his time to working out the epigraphical materials belonging to their rule. He could, however, not bring his work to a close, as he was transferred to the Indian Museum early in 1913."

Tours. I was still on tour at the beginning of the year and after visiting Agra and Fatehpur Sikri I returned to headquarters towards the close of April 1912. In October of that year I started again on tour and inspected the monuments at Delhi, Ahmedabad, Champanir, Halol, and Dhar. I then proceeded *viâ* Bombay to Bijapur and Hospet. At the latter place news of Mr. Venkayya's death reached me and compelled me to alter my plans. It had been my intention to visit Aihole and Pattadakal, but I was now obliged to omit these places from my programme and to hasten to Poona and Calcutta to arrange matters connected with the work of the Government Epigraphist. Subsequently, I visited Bankipore, Sassaram and Agra and reached Sanchi in the middle of December, where I was engaged on excavations until the end of February, 1913, and whence I also paid flying visits to Kalhar and Baro in Gwalior State. I then proceeded to Saraikala and devoted the rest of the year to the exploration of the ancient site of Taxila.

The Government Epigraphist for India left Simla on the 5th of August, 1912, and reached Ootacamund on the 14th of September, after visiting Delhi, Nasik and Bombay on the way. He stayed in Ootacamund until the 4th of November in order to push forward the publication of the *Epigraphia Indica* and his volume of South Indian Inscriptions. Owing to ill-health he proceeded to Madras on the 4th November and remained there until the day of his death, November 21st, 1912.

Publications. The publications issued during the year under review were as follows :—

(1) Annual Report of the Director General, Part II, 1908-09; (2) Provincial Reports for the Southern, Western, Eastern, Northern, Frontier and Burma Circles, as well as the Report of the Assistant Superintendent for Epigraphy, Southern Circle, for the year 1912-13; (3) *Epigraphia Indica*, Vol. X, Parts VII and VIII, and Vol. XI, Parts II-V; and (4) *South Indian Inscriptions*, Vol. II, Part IV.

Library. Seven hundred and seventy-six books and periodicals were acquired for the Central Library in Simla, of which 265 were purchased, 167 received as presents and 344 obtained in exchange for our own publications. Among the new acquisitions may be mentioned Smith's *History of Fine Art in India and Ceylon*, Stein's *The Ruins of Cathay*, 14 parts of the *Tabakat Nasiri*, Walls' *Persian Ceramic Art*, 6 volumes of the *Great Religious systems of China*, Macdonnel's *Vedic Index*, a further volume of the *Encyclopædia of Religion and Ethics*, and *Monumental Java* by J. F. Scheltema.

Six hundred and sixty-six prints were sold to the public, while 2,571 prints were prepared, partly for record in my own office, and partly for the India Office, Indian Museum and the Archæological Superintendents of various circles. A set of 525 prints was also supplied to the Director of Archæology in Java in exchange for a similar set illustrative of all the most important monuments in that island. **Photographs.**

By the death of Rai Bahadur V. Venkayya, the Government Epigraphist, which occurred on the 21st November 1912, the Archæological Department has sustained a heavy and irreparable loss. Mr. Venkayya had been in the Department for upwards of 25 years, seventeen of which were spent under the close supervision and personal instruction of Dr. Hultzsch, whose critical acumen and scholarship he had to a large extent inherited. He continued Dr. Hultzsch's work in Madras, after the retirement of the latter in 1903, and subsequently, in 1909, succeeded Dr. Konow as Government Epigraphist for India. From first to last, his life in the Archæological Department was one of assiduous labour and devotion to duty, and his work throughout was characterised by sound, reliable scholarship, of a kind which, alas, is only too rare in India. **Personnel.**

On Mr. Venkayya's death, Mr. Krishna Sastri, Assistant Superintendent, Southern Circle, was appointed from 12th December to take charge of the current duties of Government Epigraphist. Mr. Reas' deputation in the Madras Museum was extended for another year and Mr. Longhurst continued, in consequence, as Additional Superintendent, Southern Circle. Mr. Taw Sein Ko, Superintendent, Burma Circle, and Dr. J. Ph. Vogel, Superintendent, Hindu and Buddhist Monuments, Northern Circle, were granted combined leave from the 1st August and 29th September, 1912, respectively, and their places were filled by M. Duroiselle and Mr. Hargreaves, both belonging to the Educational Department. In the Western Circle the appointment of Assistant Superintendent was placed on a permanent footing, Mr. Page, A.R.I.B.A., being recruited from home to take up the new post, which he did on the 25th March, 1913. Mr. Daya Ram Sahni, whose services were transferred to the Kashmir State in November, 1911, remained on in the employ of the Darbar.

The Sanskrit scholarship held by Mr. Garde was extended for a further period of two years and he was placed under Mr. Blakiston, Assistant Superintendent, Eastern Circle, to be trained in conservation work. On the 31st January, 1913, the extension granted to Maulvi Zafar Hasan, Arabic and Persian Scholar, expired, and, as no suitable vacancy in the permanent cadre of the Department was then available for him, the Government extended his term of scholarship for another year, during which, as in previous years, he was doing epigraphical work under the guidance of Dr. Horovitz. In April, 1912, I sent up a proposal to Government recommending the entertainment of two additional Sanskrit scholars, as qualified men are urgently needed for several responsible posts in the Survey. The Government sanctioned this proposal and in the following August, Messrs. K. N. Dikshit, M.A., of Poona and Haranandan Panday, B.A., of Patna were appointed to hold the new scholarships. **Scholarships.**

J. H. Marshall,

Director-General of Archæology.

APPENDIX A.

Special grants-in-aid.—The following allotments were made out of the special grant of one lakh provided by the Government of India:—

	R
Madras	10,000
Bombay	5,500
United Provinces	9,700
Delhi	6,000
Punjab	2,000
Burma	6,000
Bihar and Orissa	8,000
Assam	2,000
North-West Frontier Province	4,000
Excavations	15,000
Library	5,000
Antiquities	8,000
Indian Museum	9,978
Publication of Delhi Darbar Loan Exhibition Monograph	5,400
Travelling Allowance of the office of the Director-General of Archæology in India	3,422
TOTAL	1,00,000

APPENDIX B.

Expenditure on the Archæological Department for the year 1912-13.

		R
Southern Circle	Archæology	33,502
	Epigraphy	15,352
Western Circle		17,455
Eastern Circle		30,205
Northern Circle	Superintendent, Hindu and Buddhist Monuments	20,310
	Superintendent, Muhammadan and British Monuments	18,772
Frontier Circle		28,477
Burma Circle		25,065
Director-General of Archæology and Government Epigraphist for India		64,524
	TOTAL	2,53,662

Expenditure on conservation and excavation including grants-in-aid from Imperial revenues.

		R
Madras		37,127
Bombay		40,888
Bengal		4,847
Bihar and Orissa	Conservation	11,077
	Excavation*	4,052
Central Provinces		10,153
United Provinces	Hindu and Buddhist Monuments	12,060
	Muhammadan and British Monuments	65,385
Punjab	Hindu and Buddhist Monuments	1,011
	Muhammadan and British Monuments	37,782
Province of Delhi		51,480
Ajmer		347
Burma		25,945
North-West Frontier Province		1,622
Excavations by the Director-General of Archæology		21,580
	TOTAL	3,28,000

* An extra sum of R15,000 was provided by Mr. Ratan Tata of Bombay and spent on the excavations at Pataliputra.

APPENDIX B—*contd.*

Special charges.

	R
Library	3,922
Antiquities	7,581
Indian Museum	9,978
Director-General's Annual Report	5,000
Epigraphia Indica	2,213
Other Archæological publications	2,000
TOTAL	30,694

APPENDIX C.

Drawings and photographs prepared by the Department.

DRAWINGS.

Southern Circle	Archæology	6
	Epigraphy	27
Western Circle		8
Eastern Circle		6
Northern Circle	Superintendent, Hindu and Buddhist Monuments	6
	Superintendent, Muhammadan and British Monuments	37
Burma Circle		21
Frontier Circle		11
Director-General of Archæology		22
	TOTAL	144

PHOTOGRAPHS.

Southern Circle	Archæology	247
	Epigraphy	68
Western Circle		108
Eastern Circle		239
Northern Circle	Superintendent, Hindu and Buddhist Monuments	194
	Superintendent, Muhammadan and British Monuments	508
Burma Circle		129
Frontier Circle		46
Director-General of Archæology		575
	TOTAL	2,114

APPENDIX D.

List of photographic negatives prepared by the Office of the Director-General of Archæology during the year 1912-13.

Serial No.	Locality.	Description.	Size.
1	Sarkhej (Ahmedabad District).	The palace with tank. General view, from South . .	8½ × 6½
2	"	Harem. General view, from South-East . . .	"
3	"	Jami Masjid Interior view	"
4	Halol (Panch Mahal District).	Sikandar Shah's tomb. General view, from West . .	"
5	"	" " " Distant view, from South-West .	"
6	"	" " " General view " " " .	"
7	"	" " " " " from South-East .	"
8	"	" " " Interior view, from East . .	"
9	Champanir City .	Jami Masjid. General view, from South-East . .	"
10	"	" " Front façade, from East . . .	"
11	"	" " Front façade, from inside the courtyard .	"
12	"	" " Detailed view from back . . .	"
13	"	" " General view, from South-West . .	"
14	"	Kevda Masjid with tomb. Distant view, from South-East	"
15	"	" " " " General view " " "	"
16	"	" " General view, from South-East . .	"
17	"	Nagina or Bandra Masjid. General view, from South-East	"
18	"	Nagina Masjid. General view of tomb in the compound, from South	"
19	"	Nila Gumbaz Mosque. General view, from South-East .	"
20	"	Bohra Masjid. General view, from South-East . .	"
21	"	" " " " " North-East . .	"
22	"	Details of city wall and portion of mosque, from North .	"
23	"	Details of west city wall, from East	"
24	"	Halol Gate, from outside	"
25	"	" " " inside	"
26	"	Eka Minar from East	"

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
27	Bombay	Prince of Wales Museum. General view, from South .	8½ × 6½
28	„	„ „ „ „ „ „ South-West	„
29	Aihole (Bijapur District).	Temple No. 9. General view, from East . . .	„
30	„	Dolmens	„
31	„	Meguti Temple. General view, from East . . .	„
32	„	Durga Temple. „ „ „ „ . . .	„
33	„	„ „ Two images inside	„
34	„	Temples, Nos. 42-45. General view	„
35	„	Huchi-Malli Temple (No. 13). General view, from South	„
36	„	Temples Nos. 53, 55 and 57 (No. 55 called Galganatha Temple). General view	„
37 and 38	„	Two images	„
39	Pattadakal	Kadasiddha, Jambulinga, and Galganatha Temples. General view, from West	„
40	„	Galganatha Temple. General view, from South-West .	„
41	„	„ „ and a smaller temple near it. General view, from South-East	„
42	„	Kadasiddha Temple. General view, from South . .	„
43	„	Saṅgamesvar Temple. „ „ „ South-East .	„
44	„	Gateway of Virupaksha Temple. Detail of statue of Ravana lifting Mount Kailasa	„
45	„	Wooden Ratha. Front view	„
46	„	Viranarayana Jaina Temple, from East . . .	„
47	„	Old Siva Temple by the side of Badami road. General view of pillars, from South	„
48	„	Details of Shrine pillars	„
49	Vijayanagar (Hampi).	Council hall. Detailed view showing basement . .	„
50	„	„ „ General view	„
51	„	Seshanarayana Temple. Statue of Vishnu inside . .	„
52	„	Vitthalaraya Temple. General view	„

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
53	Vijayanagar (Hampi).	Vitthalaraya Temple. General view of central shrine, from East	$8\frac{1}{2} \times 6\frac{1}{2}$
54	"	" " Interior, showing details of pillars, from East	"
55	"	" " Interior, showing details of pillars, from West	"
56	Baro (Central India).	Jaina Temple. General view from North-West . .	"
57	"	" " " " " West . . .	"
58	"	" " Details of pillars in the interior . .	"
59	"	Gadarmal Temple. General view, from South . .	"
60	"	" " " " " West . .	"
61	"	" " Front porch, from West . .	"
62	"	" " Capital of pillar, from South . .	"
63	"	" " Statue of Yasoda and Krishna (?) .	"
64	Sanchi (Bhopal State).	Tope I. Ground Railing Pillar, No. 60, near South Gate .	"
65	"	Tope I. Fragment of gateway (Sculpture Nos. 76 and 77)	"
66	"	" " " (" " 76 " 78)	$6\frac{1}{2} \times 4\frac{3}{4}$
67	"	" " " (" No. 79) . .	"
68	"	" " of North gateway (Sculpture No. 79) .	$8\frac{1}{2} \times 6\frac{1}{2}$
69	"	" " " " (" " 80) .	"
70	"	" " " " (" " 81) .	"
71	"	" " " " (" Nos. 82 and 83)	"
72	"	" " " " (" " 84-89) .	"
73	"	" " " " (" No. 90) .	$6\frac{1}{2} \times 4\frac{3}{4}$
74	"	" " " " (" " 91) .	"
75	"	" " " " (" " 92) .	$8\frac{1}{2} \times 6\frac{1}{2}$
76	"	" " " " (" " 93) .	$6\frac{1}{2} \times 4\frac{3}{4}$
77	"	" " " " (" Nos. 93-95) .	$8\frac{1}{2} \times 6\frac{1}{2}$
78	"	" " " " (" No. 96) .	$6\frac{1}{2} \times 4\frac{3}{4}$

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
79	Sanchi (Bhopal State).	Tope I. South gate ; right pillar ; South face (Sculpture No. 97) .	8½ × 6½
80	,,	,, ,, ,, ,, West ,, . .	,,
81	,,	,, ,, ,, ,, North ,, . .	6½ × 4¾
82	,,	,, ,, ,, ,, East ,, . .	8½ × 6½
83	,,	,, Fragment of gateway (Sculpture No. 98) . .	6½ × 4¾
84	,,	,, ,, (,, ,, 100*a*) . .	8½ × 6½
85	,,	,, ,, (,, ,, 100*b*) . .	,,
86	,,	,, ,, (,, Nos. 101-103) .	,,
87	,,	,, ,, (,, ,, 105-107) .	,,
88	,,	,, ,, (,, No. 108*a*) . .	,,
89	,,	,, ,, (,, ,, 108*b*) . .	,,
90	,,	,, ,, (,, ,, 109) . .	,,
91	,,	,, ,, (,, Nos. 110 and 115).	6½ × 4¾
92	,,	,, ,, (No. 111) . .	,,
93	,,	,, ,, (,, 112*a*) . .	8½ × 6½
94	,,	,, ,, (,, 112*b*) . .	,,
94*a*	,,	,, ,, (,, 112*c*) . .	,,
95	,,	,, ,, (Nos. 113-115) . .	,,
96	,,	,, ,, (,, 116-118) .	,,
97	,,	,, ,, (,, 120-123) .	6½ × 4¾
98	,,	,, ,, (,, 124-127) .	8½ × 6½
99	,,	,, ,, (,, 128-131) .	,,
100	,,	,, ,, (No. 132) . .	6½ × 4¾
101	,,	,, ,, (,, 133) . .	,,
102	,,	,, ,, (,, 134) . .	,,
103	,,	,, ,, (,, 135*a*) . .	8½ × 6½
104	,,	,, ,, (,, 135*b*) . .	,,
105	,,	,, ,, (Nos. 136 and 137) .	,,

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
106	Sanchi (Bhopal State).	Tope 1. Fragment of gateway (Sculpture Nos. 138 and 139) .	6½ × 4¾
107	,,	,, ,, (Nos. 140-142) . .	,,
108	,,	,, ,, (No. 143) . .	,,
109	,,	,, ,, (,, 144*a*) . .	8½ × 6½
110	,,	,, ,, (,, 144*b*) . .	,,
111	,,	,, ,, (,, 145) . .	,,
112	,,	,, ,, (,, 146) . .	6½ × 4¾
113	,,	,, ,, (Nos. 147-149) . .	8½ × 6½
114	,,	,, ,, (,, 150-152) . .	,,
115	,,	,, ,, (No. 153*a*) . .	,,
116	,,	,, ,, (,, 153*b*) . .	,,
117	,,	,, ,, (,, 154) . .	6½ × 4¾
118	,,	,, ,, (,, 155) . .	,,
118*a*	,,	,, ,, (Nos. 157 and 158) .	8½ × 6½
119	,,	,, Stairway from East	,,
120	,,	,, Reconstructed Stairway Railing, Side view . .	,,
121	,,	,, ,, ,, ,, ,, . .	,,
122	,,	,, Stairway Railing, Front view	,,
123	,,	,, ,, ,, Back ,, ...	,,
124	,,	,, ,, ,, Loose pillars . . .	,,
125	,,	,, Reconstructed Berm Railing	,,
126	,,	,, ,, ,, ...	,,
127	,,	,, ,, ,, ...	,,
128	,,	,, ,, ,, (pillar *a*)	6½ × 4¾
129	,,	,, ,, ,, (,, *b*)	,,
130	,,	Statue at North gate (Sculpture No. 1) . . .	8½ × 6½
131	,,	Buddha head at North gate (,, ,, 1) . . .	6½ × 4¾
132	,,	Statue at East gate (,, ,, 4) . . .	8½ × 6½

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
133	Sanchi (Bhopal State).	Statue at South gate (Sculpture No. 5) . .	8½ × 6½
134	,,	Seated Buddha near South gate (,, ,, 6) . .	,,
135	,,	Standing Buddha near South gate (,, ,, 7) . .	,,
136	,,	Statue at West gate (,, ,, 8) . .	,,
137	,,	Trench showing successive floors opposite South gateway	,,
137*a*	,,	,, ,, ,, ,,	,,
138	,,	Tope II. Railing pillar *No. 1, West face . . .	,,
139	,,	,, ,, ,, Nos. 1 and 2, inner face . .	,,
140	,,	,, ,, ,, ,, ,, outer ,, . .	,,
141	,,	,, ,, ,, No. 3, North ,, . .	,,
142	,,	,, ,, ,, Nos. 3 and 4, East ,, . .	,,
143	,,	,, ,, ,, ,, 4 ,, 5, West ,, . .	,,
144	,,	,, ,, ,, ,, 5 ,, 6, inner ,, . .	,,
145	,,	,, ,, ,, No. 6, outer ,, . .	,,
146	,,	,, ,, ,, Nos. 7 and 8, inner ,, . .	,,
147	,,	,, ,, ,, ,, ,, outer ,, . .	,,
148	,,	,, ,, ,, ,, 9 and 10, inner ,, . .	,,
149	,,	,, ,, ,, ,, 9 ,, 10 outer ,, . .	,,
150	,,	,, ,, ,, ,, 11 ,, 12, inner ,, . .	,,
151	,,	,, ,, ,, ,, 11 ,, 12, outer ,, . .	,,
152	,,	,, ,, ,, ,, 13 ,, 14, inner ,, . .	,,
153	,,	,, ,, ,, ,, 13 ,, 14, outer ,, . .	,,
154	,,	,, ,, ,, ,, 15 ,, 16, inner ,, . .	,,
155	,,	,, ,, ,, ,, 15 ,, 16, outer ,, . .	,,
156	,,	,, ,, ,, ,, 17 ,, 18, inner ,, . .	,,
157	,,	,, ,, ,, ,, 17 ,, 18, outer ,, . .	,,
158	,,	,, ,, ,, No. 19, inner ,, . .	,,

* The numbers commence from the North Gate.

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
159	Sanchi	Tope II. Railing pillar No. 20, inner face . .	8½ × 6½
160	,,	,, ,, ,, Nos. 19 and 20, outer ,, . .	,,
161	,,	,, ,, ,, No. 21, inner ,, . .	,,
162	,,	,, ,, ,, ,, 22, ,, ,, . .	,,
163	,,	,, ,, ,, Nos. 21 and 22, outer ,, . .	,,
164	,,	,, ,, ,, No. 23, North ,, . .	,,
165	,,	,, ,, ,, Nos. 23 and 24, inner ,, . .	,,
166	,,	,, ,, ,, ,, 23 ,, 24, outer ,, . .	,,
167	,,	,, ,, ,, No. 25, East ,, . .	,,
168	,,	,, ,, ,, Nos. 25 and 26, South ,, . .	,,
169	,,	,, ,, ,, ,, 26 ,, 27, North ,, . .	,,
170	,,	,, ,, ,, No. 27, West ,, . .	,,
171	,,	,, ,, ,, ,, 28, ,, ,, . .	,,
172	,,	,, ,, ,, Nos. 28 and 29, outer ,, . .	,,
173	,,	,, ,, ,, ,, 29 ,, 30, inner ,, . .	,,
174	,,	,, ,, ,, ,, 30 ,, 31, outer ,, . .	,,
175	,,	,, ,, ,, ,, 31 ,, 32, inner ,, . .	,,
176	,,	,, ,, ,, ,, 32 ,, 33, outer ,, . .	,,
177	,,	,, ,, ,, ,, 33 ,, 34, inner ,, . .	,,
178	,,	,, ,, ,, ,, 34 ,, 35, outer ,, . .	,,
179	,,	,, ,, ,, ,, 35 ,, 36, inner ,, . .	,,
180	,,	,, ,, ,, ,, 36 ,, 37, outer ,, . .	,,
181	,,	,, ,, ,, ,, 37 ,, 38, inner ,, . .	,,
182	,,	,, ,, ,, ,, 38 ,, 39, outer ,, . .	,,
183	,,	,, ,, ,, ,, 39 ,, 40, inner ,, . .	,,
184	,,	,, ,, ,, ,, 40 ,, 41, outer ,, . .	,,
185	,,	,, ,, ,, ,, 41 ,, 42, inner ,, . .	,,
186	,,	,, ,, ,, ,, 42 ,, 43, outer ,, . .	,,
187	,,	,, ,, ,, ,, 43 ,, 44, North ,, . .	,,

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
188	Sanchi	Tope II. Railing pillars No. 44, South face . .	8½ × 6½
189	,,	,, ,, ,, ,, 44, West ,, . .	,,
190	,,	,, ,, ,, ,, 49, East ,, . .	,,
191	,,	,, ,, ,, ,, 49, North ,, . .	,,
192	,,	,, ,, ,, Nos. 53 and 54, inner ,, . .	,,
193	,,	,, ,, ,, ,, 53 ,, 54, outer ,, . .	,,
194	,,	,, ,, ,, ,, 55 ,, 56, inner ,, . .	,,
195	,,	,, ,, ,, ,, 55 ,, 56, outer ,, . .	,,
196	,,	,, ,, ,, ,, 57 ,, 58, inner ,, . .	,,
197	,,	,, ,, ,, ,, 57 ,, 58, outer ,, . .	,,
198	,,	,, ,, ,, ,, 59 ,, 60, inner ,, . .	,,
199	,,	,, ,, ,, ,, 59 ,, 60, outer ,, . .	,,
200	,,	,, ,, ,, ,, 61 ,, 62, inner ,, . .	,,
201	,,	,, ,, ,, ,, 61 ,, 62, outer ,, . .	,,
202	,,	,, ,, ,, ,, 63 ,, 64, inner ,, . .	,,
203	,,	,, ,, ,, ,, 63 ,, 64, outer ,, . .	,,
204	,,	,, ,, ,, ,, 65 ,, 66, inner ,, . .	,,
205	,,	,, ,, ,, ,, 65 ,, 66, outer ,, . .	,,
206	,,	,, ,, ,, No. 66, North ,, . .	,,
207	,,	,, ,, ,, ,, 67, West ,, . .	,,
208	,,	,, ,, ,, Nos. 67 and 68, East ,, . .	,,
209	,,	,, ,, ,, ,, 68 ,, 69, West ,, . .	,,
210	,,	,, ,, ,, ,, 69 ,, 70, North ,, . .	,,
211	,,	,, ,, ,, ,, 70 ,, 71, South ,, . .	,,
212	,,	,, ,, ,, ,, 71 ,, 72, East ,, . .	,,
213	,,	,, ,, ,, No. 72, outer ,, . .	,,
214	,,	,, ,, ,, Nos. 73 and 74, inner ,, . .	,,
215	,,	,, ,, ,, Nos. 73 ,, 74, outer ,, . .	,,
216	,,	,, ,, ,, ,, 75 ,, 76, inner ,, . .	,,

Appendix D—*contd.*

Serial No.	Locality.	Description.	Size.
217	Sanchi	Tope II. Railing pillars Nos. 75 and 76, outer face . .	$8\frac{1}{2} \times 6\frac{1}{2}$
218	„	„ „ „ „ 77 „ 78, inner „ . .	„
219	„	„ „ „ „ 77 „ 78, outer „ .	„
220	„	„ „ „ „ 79 „ 80, inner „ .	„
221	„	„ „ „ „ 79 „ 80, outer „ . .	„
222	„	„ „ „ „ 81 „ 82, inner „ . .	„
223	„	„ „ „ „ 81 „ 82, outer „ . .	„
224	„	„ „ „ „ 83 „ 84, inner „ . .	„
225	„	„ „ „ „ 83 „ 84, outer „ . .	„
226	„	„ „ „ „ 85 „ 86, inner „ . .	„
227	„	„ „ „ „ 85 „ 86, outer „ . .	„
228	„	„ „ „ „ 87 „ 88 inner „ . .	„
229	„	„ „ „ „ 87 „ 88, outer „ . .	„
230	„	„ „ „ No. 88, East „ . .	„
231	„	„ „ „ (loose), inner face (Mis. P. 1. a) .	„
232	„	„ „ „ „ outer „ („ „ 1. b) .	„
233	„	„ „ „ „ inner „ („ „ 2. a) .	„
234	„	„ „ „ „ outer „ („ „ 2. b) .	„
235	„	„ „ „ „ inner „ („ „ 3. a) .	„
236	„	„ „ „ „ („ „ 3. b) .	„
237	„	„ „ „ „ („ „ 4.) .	„
238	„	„ „ „ „ („ „ 5. a) .	„
239	„	„ „ „ „ („ „ 5. b) .	„
240	„	„ „ „ Detail of Medallions	„
241	„	Berm Railing pillars (loose), inner face . . .	„
242	„	„ „ „ „ outer „	„
243	„	Tope III. Stairs from East	„
244	„	„ „ „ West	„
245	„	„ Portion of re-constructed Stairway Railing .	„

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
246	Sanchi	Tope III. Portion of re-constructed Berm Railing . .	8½ × 6½
247	,,	,, Railing pillars (loose), inner face . . .	,,
248	,,	,, ,, ,, ,, outer ,, . . .	,,
249	,,	,, II. Portion of re-constructed Hti Railing . .	,,
250	,,	,, Coping of Hti railing	,,
251	,,	,, V. General view, from South-East . . .	,,
252	,,	,, VI. ,, ,, ,, ,, before clearance	,,
253	,,	,, ,, ,, ,, ,, North-West . .	,,
254	,,	,, VII. ,, ,, ,, North-East, before repairs	,,
255	,,	,, ,, ,, ,, ,, South-East .	,,
256	,,	,, General view, from North-East, after repairs .	,,
257	,,	Gupta Temple XVII. Front view	,,
258	,,	,, ,, General view, from West . .	,,
259	,,	,, ,, Pillars in front porch . .	,,
260	,,	,, ,, Doorway jambs and lintels .	6½ × 4¾
261	,,	Building XIX. South-West Bastion and South wall, from South	8½ × 6½
262	,,	,, ,, Inner face of South wall from North .	,,
263	,,	,, ,, Lower monastery, East end (interior) .	,,
264	,,	,, ,, Lower chamber on South-West side .	,,
265	,,	Monastery XX, from South-West	,,
266	,,	,, Interior view, from North . .	,,
267	,,	,, ,, ,, ,, ,, . . .	,,
268	,,	,, ,, ,, ,, South-East . .	,,
269	,,	,, ,, ,, ,, ,, . . .	,,
270	,,	,, ,, ,, ,, South-West .	,,
271	,,	,, View from North-East . . .	,,
272	,,	,, Newly repaired South-West wall . .	,,
273	,,	,, Exterior view from West . . .	,,
274	,,	,, ,, ,, ,, North-West . .	,,

APPENDIX D—*contd.*

Serial No.	Locality.	Description.		Size.
275	Sanchi	Monastery XX	Interior view, from West . . .	8½ × 6½
276	"	Temple XXI.	General view, from West . . .	"
277	"	"	Doorway of main shrine and statues inside	"
278	"	"	Statue in main shrine	"
279	"	"	Pillar to left of above	"
280	"	"	" right "	"
281	"	"	Ceiling of main shrine	"
282	"	"	Doorway of shrine in North wing . .	"
283	"	"	" " South " . .	"
284	"	"	Statue in South wing (sculpture 63) .	"
285	"	"	Figure on left door of shrine in South wing	6½ × 4¾
286	"	"	Figure on main door in South wing . .	"
287	"	"	Details of plinth	8½ × 6½
288 to 304	"	"	" "	"
305	"	Temple XXII.	General view, from North-West . .	"
306	"	"	" " " South-West . .	"
307	"	"	" " " North . . .	"
308	"	"	" " " North-East . .	"
309	"	"	" " " North-West . .	"
310	"	"	" " " South . . .	"
311	"	"	Detail of wall from North . . .	"
312	"	"	North wall, from West	"
313	"	"	Wall at North-East corner . . .	"
314	"	"	West wall near stairs at South-West corner, from West	"
315	"	"	West wall (exterior). West side from North	"
316	"	"	Stair at South-West corner . . .	"
317	"	"	" " " . . .	"

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
318	Sanchi	Temple XXII. Stair at West side	$8\frac{1}{2} \times 6\frac{1}{2}$
319	,,	Figure of elephant unearthed from temple XXII (Sculpture No. 177)	$6\frac{1}{2} \times 4\frac{3}{4}$
320	,,	Figure of elephant unearthed from temple XXII, another view	,,
321	,,	Figure of elephant unearthed from temple XXII, another view	,,
322	,,	Monastery XXIII. General view, from North-West .	$8\frac{1}{2} \times 6\frac{1}{2}$
323	,,	,, ,, ,, South-West .	,,
324	,,	,, XXIV. ,, ,, South-East .	,,
325	,,	Stupa XXX. ,, ,, South-West .	,,
326	,,	Gupta Temple XXXI. Front view, from South . .	,,
327	,,	,, General view, from North-West, showing Tope V in background .	,,
328	,,	,, General view, from South-East, showing pillar XV in foreground	,,
329	,,	,, General view, from South-East, showing Tope V in background .	,,
330	,,	,, Statue in central chamber . .	,,
331	,,	,, Figure of Nagini to proper right of steps	,,
332	,,	Inscribed stone slab from dome of Tope I	,,
333	,,	Small votive stupa (Mis. Sc. No. 1)	,,
334	,,	,, ,, ,, (,, ,, ,, 2)	,,
335	,,	,, ,, ,, (,, ,, ,, 3)	,,
336	,,	Bodhisattva statuette (Mis. Sc. No. 4)	,,
337	,,	,, ,, (,, ,, ,, 5)	,,
338	,,	Figure of standing Buddha, feet missing (Mis. Sc. No. 6)	,,
339	,,	Buddha statuette and seated female figures (Mis. Sc. Nos. 7 and 8)	,,
340	,,	Carved capital of pillar (Mis. Sc. No. 9)	,,
341	,,	Loose pillars (,, ,, Nos. 11—13) . . .	,,
342	,,	Standing Buddha statuette (,, ,, No. 14) . . .	,,

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
343	Sanchi	Pedestal of seated image (Mis. Sc. No. 15) . .	6½ × 4½
344	,,	,, with seated figure on one side (Mis. Sc. No. 16) .	,,
345	,,	,, ,, broken standing figure (,, ,, ,, 17) .	8½ × 6½
346	,,	Pedestals (Mis. Sc. Nos. 18 and 20) . . .	,,
347	,,	Seated Buddha statuette (Mis. Sc. No. 19) . . .	,,
348	,,	Lion throne of seated image (Mis. Sc. No. 21) . .	,,
349	,,	Fragments of polished stone umbrella (Mis. Sc. No. 22) .	6½ × 4¾
350	,,	,, ,, ,, ,, (,, ,, ,, 23) .	,,
351	,,	Loose doorway jamb of Temple XVIII (Mis. Sc. No. 30).	8½ × 6½
352	,,	Pedestal of seated figure (Mis. Sc. No. 31) . . .	,,
353	,,	Votive stupa (Mis. Sc. No. 32)	,,
354	,,	,, ,, (,, ,, ,, 33)	,,
355	,,	Standing figure and Makara (Mis. Sc. Nos. 34 and 35) .	,,
356	,,	Standing figure and capital of pillar (Mis. Sc. Nos. 36 and 38)	,,
357	,,	Buddha statuette and a seated goddess (Mis. Sc. Nos. 37 and 40)	,,
358	,,	Architectural fragment (Mis. Sc. No. 39) . . .	,,
359	,,	Standing figure and architectural fragment (Mis. Sc. Nos. 41 and 42)	,,
360	,,	Pedestal of image (Mis. Sc. No. 43)	,,
361	,,	Carved pillar (,, ,, ,, 44)	,,
362	,,	Lion throne (,, ,, ,, 45)	,,
363	,,	Buddha statuette (,, ,, ,, 46)	,,
364	,,	Architectural fragment (Mis. Sc. No. 47) . . .	,,
365	,,	,, ,, (,, ,, ,, 48) . . .	,,
366	,,	Seated image, without head (Mis. Sc. No. 49) . .	,,
367	,,	Architectural fragment (,, ,, ,, 50) .	,,
368	,,	Standing figure, mutilated (,, ,, ,, 51) . .	,,
369	,,	Lion and lotus throne (Mis. Sc. Nos. 52 and 53) . .	,,
370	,,	Capital of pillars (,, ,, ,, 54 ,, 55) . .	,,

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
371	Sanchi	Standing figure (Mis. Sc. No. 56)	$8\frac{1}{2} \times 6\frac{1}{2}$
372	„	Standing Naga figure („ „ „ 57)	„
373	„	Carved pillar (Mis. Sc. No. 58)	„
374	„	Seated figures without head (Mis. Sc. Nos. 59 and 60) .	„
375	„	Capital of Gupta pillar XIII („ „ No. 61) .	„
376	„	Standing figure (Mis. Sc. No. 62)	„
377	„	„ „ („ „ „ 69)	$6\frac{1}{2} \times 4\frac{3}{4}$
378	„	Pieces of door-jamb in front of Temple XXI (Mis. Sc. No. 170)	„
379	„	Loose sculpture inside Temple XXI (Mis. Sc. No. 171) .	„
380	„	Inscribed pedestal (Mis. Sc. No. 172)	„
381	„	Buddha head („ „ „ 173)	„
382	„	Female statuette from South of Tope V (Mis. Sc. No. 174)	$8\frac{1}{2} \times 6\frac{1}{2}$
383	„	Votive stupa (Mis. Sc. No. 175)	„
384	„	Statue; head and feet missing (Mis. Sc. No. 176)	„
385	„	Lion, mutilated (Mis. Sc. No. 178)	„
386	„	Carved railing pillar (Mis. Sc. No. 179)	„
387	„	Portion of Asoka column *in situ* (No. XI)	„
388	„	Inscription on same	„
389	„	Lion capital of same	„
390	„	Lion capital of Asoka column, another side	„
391	„	„ „ „ „ third „	„
392	„	„ „ „ „ fourth „	„
393	„	Loose pieces of Asoka column	„
394	„	„ „ „ „	$6\frac{1}{2} \times 4\frac{3}{4}$
395	„	Gupta pillar XIII from North	$8\frac{1}{2} \times 6\frac{1}{2}$
396	„	Base of same, from East	$6\frac{1}{2} \times 4\frac{3}{4}$
397	„	Pillar XIV, from North	$8\frac{1}{2} \times 6\frac{1}{2}$
398	„	Bell capital of same (Sculpture No. 73*a*)	$6\frac{1}{2} \times 4\frac{3}{4}$

APPENDIX D—*contd.*

Serial No.	Locality.	Description	Size.
399	Sanchi	Bell capital of same (Sculpture No. 73*b*)	6½ × 4¾
400	"	Lion capital of same (" " 74*a*) . . .	"
401	"	" " " (" " 74*b*) . . .	"
402	"	" " " (" " 74*c*) . . .	"
403	"	Pillar XV (in 3 pieces)	8½ × 6½
404	"	Capital of same (Sculpture No. 75*a*) . . .	"
405	"	" " (" " 75*b*)	"
406	"	" " (" " 75*c*)	"
407	"	" " (" " 75*d*	"
408	"	Flight of steps east of Tope I	6½ × 4¾
409	"	Later causeway from Tope I to building XIX . .	"
410	"	Ancient walling below wall, east of Tope I . . .	"
411	"	Wall, east of Tope I, from West	8½ × 6½
412	"	Chaitya hall XVIII, from South-West . . .	"
413	"	Terracotta sealings discovered to east of same . .	"
414	"	" " " " " . .	"
415	"	Buddha statuette from centre of Stupa XXVIII, Front view	"
416	"	Buddha statuette from centre of Stupa XXVIII, Side view	"
417	"	Inscribed pedestal from centre of Stupa XXIX . .	"
418	"	Earthen reliquary from centre of Stupa XXX . .	"
419	"	Coping fragment in front of temple XXXI . . .	"
420	"	Estampages of inscriptions Tope I, Ground rail, Nos. 1-31	12 × 10
421	"	Estampages of inscriptions Tope I, Ground rail, Nos. 32-72	"
422	"	Estampages of inscriptions. Tope I; Ground rail Nos. 73-101	"
423	"	" " " " 102-141	"
424	"	" " " " 142-179	"
425	"	" " " " 180-218	"

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
426	Sanchi (Bhopal State).	Estampages of inscriptions. Tope I, Ground rail Nos. 219-257	12 × 10
427	„	„ „ „ „ 258-293	„
428	„	„ „ „ „ 294-321	„
429	„	„ „ „ „ 322-356	„
430	„	„ „ (loose) Nos. 1-26 and North Gateway, Nos. 1-6.	„
431	„	„ „ East Gateway, Nos. 1-3; South Gateway, Nos. 1-4; West Gateway, Nos. 1-4; Pavement slabs, Nos. 1-11.	„
432	„	„ Tope I. Pavement slabs Nos. 12-49, West Gateway (loose), Nos. 1-4; Stairway rail (loose), Nos. 1-16	„
433	„	„ Berm rail (loose), Nos. 1-72 . .	„
434	„	„ „ „ „ 73-135 and Hti rail (loose), Nos. 1-7 . . .	„
435	„	Tope II. Ground rail Nos. 1-52 . .	„
436	„	„ „ „ „ 53-63 . .	„
		„ „ „ „ (loose), Nos. 1-4 .	
		„ Pavement slabs Nos. 1-3 . .	
		Stairway steps. Nos. 1-2	
		„ rail, loose	
		Berm rail (loose), Nos. 1-10	
437	„	„ „ „ „ 11-17	„
		Tope III (loose), Nos. 1-4	
		„ V „ „ 1-6	
		Asoka Edict	
		Pillar XIV „ 1-12	
		Pillar XV.	
438	„	Monastery XIX (loose) Nos. 1-12	„
		„ XX „ „ 1-4	
		Temple XXI „ 1-6 . . .	
		„ XXII „ 1-2 . . .	

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
439	Sanchi	Temple XXII (loose), Nos. 1-26 .	12 × 10
		Monastery XXIII, Nos. 1-2 . . .	
		" XXIV " 1-2	
		" XXV.	
		Tope XXIX (loose)	
		Temple XXXI "	
		Miscellaneous. Nos. 1-17	
440	"	" " 18-36	"
441	Taxila.	Chir Tope. B. 3. General view, from North . .	8½ × 6½
442	"	" B. 7. " " " East . .	"
443	"	" D. 1. " " " South . .	"
444	"	" D. 1. Front wall, from South . . .	6½ × 4¾
445	"	" E. 2. General view, from North-East .	8½ × 6½
446	"	" G. 1. " " " South-East .	"
447	"	" G. 1. Front wall, from South . . .	6½ × 4¾
448	"	" G. 4. Wall at back of stairs, from South .	"
449	"	" " View showing findspot of two relic caskets, from North . . .	"
450	"	" " General view, from South-West .	8½ × 6½
451	"	" " " " " a slightly different point	"
452	"	" " Stairway, from South-West . .	"
453	"	" H. 1. General view, from South-West . .	"
454	"	" " " " " West . . .	"
455	"	" H. 3. Back wall, from South-East . .	6½ × 4¾
456	"	" " General view, from East . . .	8½ × 6½
457	"	" I. 2. " " " South . . .	"
458	"	" I. 3. " " " South-East . .	"
459 to 466	"	" J. Upper frieze, " North-West . .	"

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
467	Taxila .	Chir Tope. J. Upper frieze, from North . .	8½ × 6½
468	,,	,, ,, Lower ,, ,, West . .	,,
469	,,	,, ,, General view, ,, South-West . .	,,
470	,,	,, ,, ,, ,, ,, ,, . .	,,
471	,,	,, ,, ,, ,, ,, West . . .	,,
472	,,	,, ,, ,, ,, ,, North-East . .	,,
473	,,	,, ,, ,, ,, ,, North-West . .	,,
474	,,	,, ,, Pit to West showing two early levels .	,,
475	,,	,, K. General view, from South . .	,,
476	,,	,, ,, Buddha figure in central niche on North face of plinth	,,
477	,,	,, Main *stūpa*, General view, from North	6½ × 4¾
478	,,	,, ,, ,, North gateway ,, ,, .	8½ × 6½
479	,,	,, ,, ,, ,, ,, ,, ,,	,,
480	,,	,, ,, ,, South gateway, from South .	,,
481	,,	,, ,, ,, Stairway from North-West .	,,
482	,,	,, ,, ,, Base mouldings and berm from North-West	,,
483	,,	,, ,, ,, Radiating walls, from North	,,
484	,,	,, ,, ,, General view, from North-East	6½ × 4¾
485	,,	,, ,, ,, ,, ,, ,, South .	,,
486	,,	,, ,, ,, ,, ,, ,, North-West	,,
487	,,	,, Stone sculpture representing seated Buddha with female devotees	8½ × 6½
488	,,	,, Steatite casket	6½ × 4¾
489	,,	,, Three stucco heads	,,
490	,,	,, ,, ,, ,, ...	,,
491	,,	,, Stucco hands, heads, etc. . . .	,,
492	,,	,, Headless figure and two heads . .	,,
493	,,	,, Three stucco heads	,,

APPENDIX D—*contd.*

Serial No.	Locality.	Description.		Size.
494	Taxila .	Chir Tope.	Ten stucco objects	$6\frac{1}{2} \times 4\frac{3}{4}$
495	,,	,,	Stone sculpture	,,
496	,,	,,	Stone figure of seated Buddha . .	,,
497	,,	,,	Two stone sculptures	,,
498	,,	,,	Three stone sculptures	,,
499	,,	,,	Two fragments of stone sculpture . .	,,
500	,,	,,	Four ,, ,, ,, .	,,
501	,,	,,	Three inscribed stone fragments . .	,,
502	,,	,,	Two ,, ,, . .	,,
503	,,	,,	Sixteen stone heads	,,
504	,,	,,	Twenty-six stone heads . . .	,,
505	,,	,,	Six terracotta figures, pots, etc. . .	,,
506	,,	,,	Stucco head	,,
507	,,	,,	Three stucco heads . .	,,
508	,,	,,	Stone sculpture representing figure with bow and arrow	,,
509	,,	,,	Two stone figurines and a lion . .	,,
510	,,	,,	Two stone reliefs	,,
511	,,	,,	Stone Corinthian capital . . .	,,
512	,,	Chir Tope & Sirkap.	Three stucco heads	,,
513	,,	Sirkap.	General view of excavations, from North-West	$8\frac{1}{2} \times 6\frac{1}{2}$
514	,,	,,	General view of excavations, from South	,,
515	,,	,,	,, ,, towards Shrine I, from South-West	,,
516	,,	,,	General view towards Shrine II, from North-East	,,
517	,,	,,	General view towards Shrine II, from another point	,,
518	,,	,,	General view towards Shrine I, from South, showing rows of earthen pots in adjacent room	,,

APPENDIX D—*contd.*

Serial No.	Locality.	Description.		Size.
519	Taxila .	Sirkap.	Central stairway to East of High Street, from North-West . . .	8½ × 6½
520	,,	,,	Central stairway showing portion of adjacent wall, from North-West . . .	,,
521	,,	,,	Stone platform in trench (at 59·64) behind central stairway, from North-West .	6½ × 4¾
522	,,	,,	Overturned *stūpa* showing stucco decoration at base, from North-West . .	,,
523	,,	,,	Overturned *stūpa* showing stucco decoration at base, from South-West . .	8½ × 6½
524	,,	,,	Shrine I, from West . . .	,,
525	,,	,,	,, II, ,, ,, ...	6½ × 4¾
526	,,	,,	,, ,, North-West . . .	8½ × 6½
527	,,	,,	Three pieces of pottery . . .	6½ × 4¾
528	,,	,,	,, ,, ,, . . .	,,
529	,,	,,	Twelve ,, ,, . . .	,,
530	,,	,,	,, ,, ,, . . .	,,
531	,,	,,	Four ,, ,, . . .	,,
532	,,	,,	A pot and a cup	,,
533	,,	,,	Three pots	,,
534	,,	,,	Four pieces of pottery	,,
535	,,	,,	Large vase	,,
536	,,	,,	Terracotta objects	,,
537	,,	,,	,, ,, ...	,,
538	,,	,,	Broken casket and a plaque	,,
539	,,	,,	Stucco lion	,,
540	,,	,,	,, ,, ...	,,
541	,,	,,	Stone grind-stool	,,
542	,,	,,	Steel helmet	,,
543	,,	Jhandial.	Mound C. General view, from South-East .	8½ × 6½
544	,,	,,	,, D. ,, ,, ,, East . .	,,
545	,,	,,	Temple in mound C. View from South-West .	,,

APPENDIX D—*contd.*

Serial No.	Locality.	Description.	Size.
546	Taxila	Jhandial. Temple in mound C. View of North wall of 2nd enclosure, from North-East . .	8½ × 6½
547	,,	,, ,, ,, ,, ,, ,,	,,
548	,,	,, Monastery. View from South-West . .	,,
549	,,	,, Temple C. Entrance on South side, from South .	,,
550	,,	,, ,, ,, ,, ,, ,, .	,,
551	,,	,, ,, Two front pillar bases, from South-East	,,
552	,,	,, ,, ,, ,, ,, South-West	,,
553	,,	,, ,, Pillar base at South-East corner of 2nd enclosure, from South-West .	,,
554	,,	,, ,, Inner face of East side of outer-most enclosure, from South-West .	,,
555	,,	,, ,, Outer face of West side of outer-most enclosure, from West . .	,,
556	,,	,, ,, Pillar base in front of 2nd enclosure, from South-East . . .	,,
557	,,	,, *Stūpa*, A. General view from West . .	,,
558	,,	,, ,, ,, ,, ,, South-West .	,,
559	,,	,, ,, B. ,, ,, ,, North-West .	,,
560	,,	,, ,, ,, ,, ,, South-West .	,,
561	,,	,, ,, ,, ,, ,, South-East .	,,
562	,,	,, Three pieces of pottery	6½ × 4¾
563	,,	,, Terracotta objects	,,
564	,,	,, ,, female figure	,,
565	,,	Jhandial and Bir Mound. Stone sculptures, terracottas and an inscribed crucible	,,
566	,,	Bir Mound. Terracotta objects	,,
567	,,	,, ,, ,, ...	,,
568	,,	,, Earthen pots	,,
569	,,	,, ,, ,, ...	,,
570	,,	,, Pieces of pottery	,,

Appendix D—*concld.*

Serial No.	Locality.	Description.	Size.
571	Attock.	Haji Shah near Attock. Limestone boulder, bearing "cup and ring" marks	8½ × 6¼
572	"	Haji Shah near Attock. Dugi Jabi rock carved with hunting scenes	"
573	Misc.	Purchased. Two pots	6½ × 4¾
574	"	" Sculptured stone panel	"
575	"	" Stucco head	"

Appendix E.

Annual Report of the Indian Museum, Archæological Section, 1912-1913.

Establishment.—Mr. Rakhal Das Banerji, Assistant Superintendent, remained as my Deputy in charge of the Archæological Section from the beginning of the financial year to the 13th March, when, with the consent of the Government of India and the Trustees of the Indian Museum, he was replaced by Dr. D. B. Spooner, Ph.D., Superintendent, Archæological Survey, Eastern Circle. Mr. Rakhal Das Banerji remained attached to the Section as Dr. Spooner's assistant.

In addition to the staff sanctioned by the Government of India in 1912, one peon on Rs. 9 was sanctioned in January 1913.

Leave.—(1) The Assistant Superintendent in charge was absent on privilege leave for 29 days from the 25th May to 23rd June, both days inclusive. During this period Dr. Annandale, Superintendent, Indian Museum, and Mr. S. W. Kemp, Officiating Superintendent, Indian Museum, kindly consented to take charge of the Archæological Section.

(2) Munshi Wahi-uddin Ahmad, Marksman, was granted privilege leave for two months from the 13th February 1913, and was absent till the end of the financial year.

Accommodation.—(1) Office.—It is satisfactory to report that the congestion so long felt in the office of the Section was removed early in the year, when the new office rooms became ready for occupation. The second floor of the new wing has been divided between the Art and Archæological Sections, and the portion allotted to this Section was sub-divided by brick partitions into the following rooms :—

(1) A large room to be used as Library and as the office of the Director-General of Archæology, when in Calcutta.

(2) An office for the Superintendent-in-charge.

(3) An office for the Assistant Superintendent.

(4) A room for the use of the office establishment

(5) A passage of communication along the western wall.

Besides these, a dark-room, and lavatories for gazetted and non-gazetted officers were provided. All these are used in common with the Art and Zoological and Anthropological Sections. An Electric Lift was put in and is being used by officers and clerks. The Superintendent of the Indian Museum kindly lent a room permanently to this Section in the main building, which is being utilised as a work-room.

(2) Godowns.—The godowns under the new wing were divided equally between the Art and Archæological Sections. Out of the five godowns allotted to this Section four were occupied in July 1912, but the 5th was occupied by the Public Works Department till the end of the year. The duplicate and rejected specimens in the old Archæological godown were removed to the new ones in the same month. The fifth room, when it is made available, will be used to accommodate a number of plaster casts and duplicate specimens, which are stored at present in the ground-floor of the quarters of the Superintendent of the Museum.

(3) Servants' Quarters.—Only five rooms were allotted to this Section in 1911, which were sufficient at that time. But additions to the menial staff since that date have made it impossible to provide quarters for all. Since the removal of Dr. Spooner's office to Calcutta, two rooms have been kindly lent by Dr. Annandale. Proposals for the construction of separate servants' quarters are being submitted to the Government of India.

(4) Galleries.—The ground floor room in the new wing remained in the occupation of the Trustees of the Victoria Memorial throughout the year. It is probable that this gallery will be made available for occupation early next year, as it is settled that the Victoria Memorial Exhibition will be removed to Belvedere. For want of accommodation most of the specimens acquired during the year were exhibited on temporary pedestals in the south verandah of the main building, ground-floor.

Furniture.—Coin Room.—Out of the original grant of Rs. 7,000 made by the Government of India for the purchase of coin cabinets in connection with the re-arrangement of the Museum coin collections on up-to-date lines, a revised estimate enabled me to save Rs. 2,750, out of which I was able to provide the much-needed furniture for both the large library room and the two smaller rooms for the gazetted officers of the Section, without asking for another special grant for this purpose. All the offices may now be said to be very well equipped, especially the main or library room, where ample accommodation now exists for visiting members of the Department as well as for research scholars.

Financial.—During the year Rs. 2,400 in all was received from the Trustees of the Museum of which half was set apart for the pay of the Gallery Assistant and the remainder for the purchase of antiquities.

Four special grants were made by the Government of India, namely :—(1) Rs. 7,000 for the purchase of coin cabinets ; (2) Rs. 2,000 for the purchase of books for the library ; (3) Rs. 3,000 for contingencies at the beginning of the year, out of which, Rs. 324 was reappropriated for the salary of the extra establishment ; (4) Rs. 2,978 as a further grant for contingencies.

Library.—119 books were added to the library during the year. Pandit Binodbihari Bidyabinod prepared a list of the books transferred from the Library of the Zoological and Anthropological Section, as well as those purchased at the end of the year. The Gallery Assistant was also employed in arranging the books, checking the lists and making alphabetical indexes. The addition to the library furniture has now made it possible to have new books and publications arranged on separate tables and to have separate index cabinets in the library and the officer's rooms.

Collection of Photographic Prints.—1,837 prints were added to the collection during the year. These were temporarily kept in bundles, as there was at the time nobody in the office competent to mount and arrange them. This work will now be done by Dr. Spooner's photographer.

The Galleries.—During the year steps were taken to conserve the railing and gateway of the Bharhut Stupa, which was found to be crumbling away on account of the destructive alkalis of the subsoil water of Calcutta creeping through the floor. On the advice of Mr. G. H. Tipper, Officiating Superintendent, Geological Survey of India, the bases of the pillars of the railing were protected against further chemical action by inserting beneath them a layer of zinc sheets and another layer of 1" thick silica tiles, with zinc between the joints. In addition to these measures the lower parts of the pillars were covered with a thick layer of water-glass up to a height of 1' from the floor level. Three inscribed stelæ from Java, which were decaying rapidly owing to the same cause, were also similarly treated. Though the application of the water-glass has not been wholly satisfactory, owing to its proving less transparent than was expected, the decay of these monuments has been effectively arrested.

The railing of the Bharhut Stupa suffered further damage from another cause. In November last it was found that the old plaster restorations of the architrave had cracked badly, and subsequently that every joint in the railing had moved slightly and opened out. Since the addition of another storey on the top of the main building the front of the Museum has subsided considerably causing dangerous cracks in the Archæological and Bird galleries. The damage to the railing of the Bharhut Stupa is no doubt due to this subsidence. The matter was reported to me immediately and temporary measures were taken for the safety of the specimens. More permanent measures will be taken when Dr. Spooner is on the spot.

New Accessions :—

(1) General Archæology :—

(*a*) Twenty-five pieces of statuary removed from the Circuit House, Puri, at the request of the Officiating Director-General of Archæology (N. S. 2221-2242 ; 2262-2264).

(*b*) A magnificent stone lintel and an image of Parvati from the Kedaresvara Temple, Hallebid, presented at my suggestion by the Mysore Darbar (N. S. 2243-2244).

(*c*) Three unique bronze images found at Sahibganj, sub-division Gaibandha, in the Rungpur District, (N. S. 2249-2251), presented by the Government of Bengal.

(*d*) A new inscription of Alauddin Hussain Shah, dated Hijri 916, found at Mangalkot, in the Burdwan District of Bengal, and presented by the same Government (N. S. 2255).

(*e*) Some silver, brass, stone and bone specimens collected by Lieutenant A. T. Wilson at Khurramabad, Persia (N. S. 2256-2261).

(*f*) Some ancient agricultural implements found at Uparkot in the Junagadh State (N. S. 2267-2271) and presented by the Darbar.

(*g*) A Bodhisattva image and two book-covers purchased in the Darjeeling District.

(2) *Coins.*—During the year, the coins catalogued by Messrs. V. A. Smith and H. N. Wright were taken out of the safe and arranged in wooden cabinets in the new Coin room, the Muhammadan coins by Mr. Zafar Hasan, Archæological Research Scholar, who was deputed by me for this purpose, and the remainder by Mr. Rakhal Das Banerji. The work of classifying and arranging the duplicates, foreign coins, etc., will be taken up next year. During the year 159 coins were added to the cabinet. Lieutenant A. T. Wilson presented a collection of silver Parthian and Sassanian coins acquired by him in Persia and other coins were received as presentations from the Cooch Bihar, Bikaner and Piploda States. Nineteen silver coins of Kumaragupta I of the Imperial Gupta dynasty were purchased from Mr. N. M. Billimoria of Bhuj, Cutch, from Trust funds. Besides these a part of Mr. Bleazby's collection was purchased by me from Imperial funds and loaned to the museum.

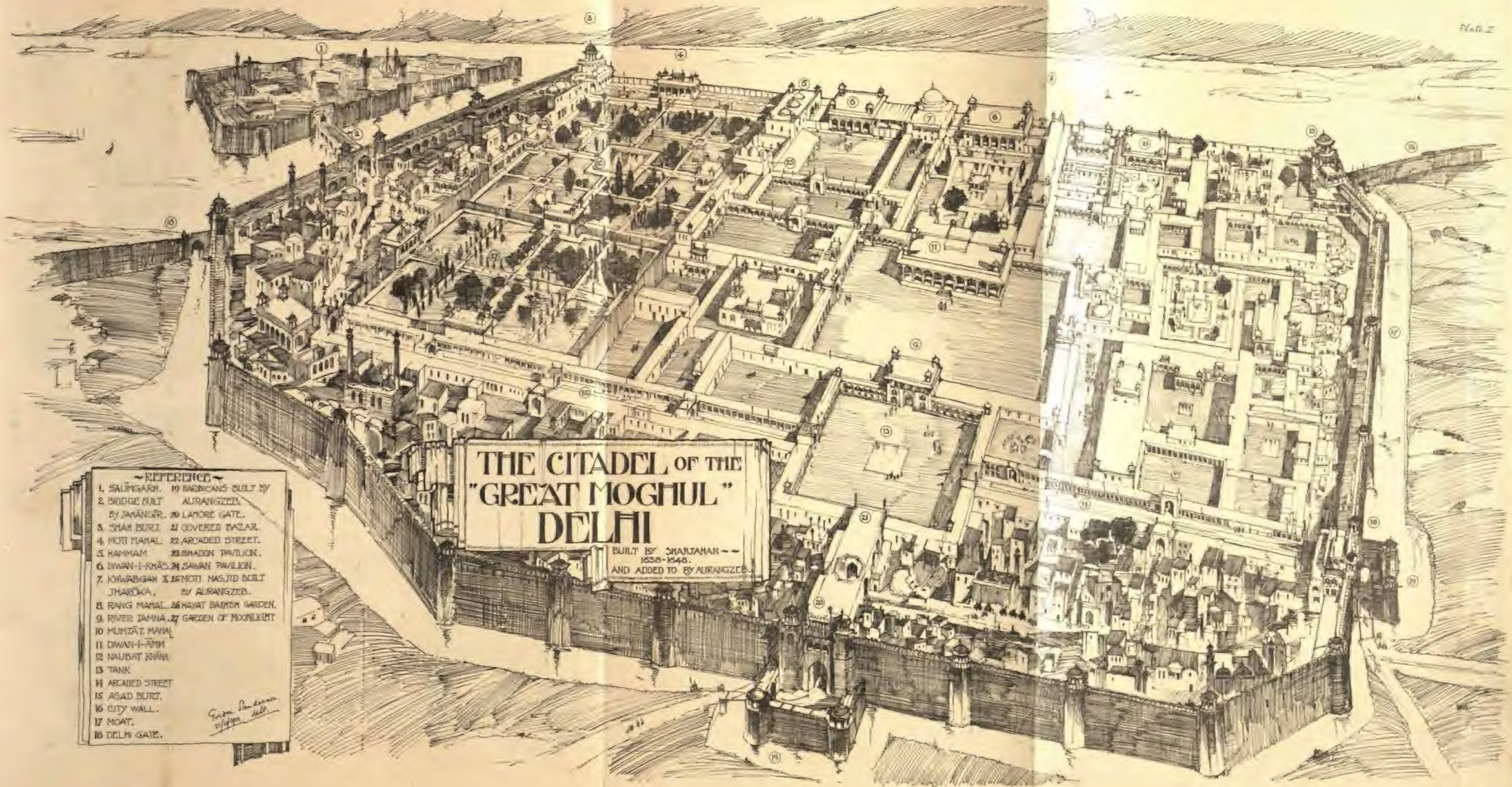
Below is given a classified list of coins added to the cabinet during the year :—

Class.	Gold.	Silver.	Copper.
Indo Greek	...	1	...
Imperial Guptas	...	19	...
Mediæval India	8	3	...
Parthians	...	37	...
Sassanians	...	7	...
Sultans of Delhi	...	...	8
Sultans of Bengal	...	3	...
Bahmani Sultans	3	...	...
Sultans of Gujarat	...	...	1
Sultans of Kashmir	...	14	...
Sultans of Jaunpur	...	...	4
Mughal	...	19	...
Native States	1	6	2
Shahs of Persia	...	6	11
Miscellaneous	...	6	...
TOTAL	12	121	26

Tours.—In April 1912 the Gallery Assistant was deputed to Puri to pack and despatch the specimens lying in the Circuit House. The Assistant Superintendent in charge was sent to Darjeeling for the collection of specimens in the first half of May and was absent for fourteen days. During this period Dr N. Annandale very kindly held charge of the Section.

J. H. MARSHALL,

Director-General of Archæology.

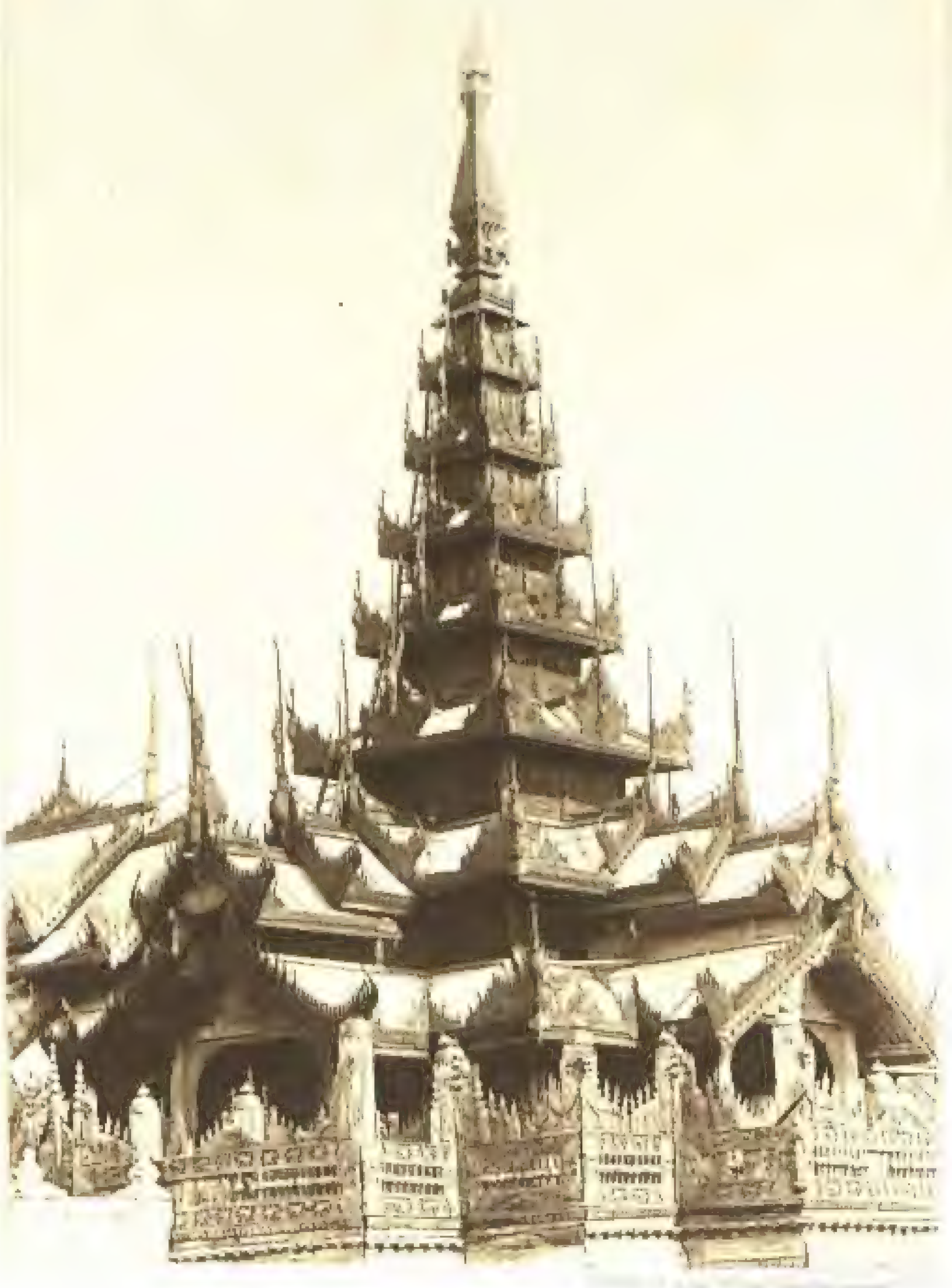

Plate II
THE CITADEL OF THE "GREAT MOGHUL" DELHI
BUILT BY SHAHJAHAN 1638-1648.
AND ADDED TO BY AURANGZEB.
~REFERENCE~
1. SALIMGARH.
2. BRIDGE BUILT BY JAHANGIR.
3. SHAH BURJ.
4. MOTI MAHAL
5. HAMMAM
6. DIWAN-I-KHĀS.
7. KHWABGAH & JHARŌKA.
8. RANG MAHAL.
9. RIVER JAMNA.
10 MUMTĀZ MAHAL
11 DIWAN-I-ĀMM
12 NAUBAT KHĀNA
13 TANK
14 ARCADED STREET
15 ASAD BURJ.
16 CITY WALL.
17 MOAT.
18 DELHI GATE.
19 BARBICANS BUILT BY AURANGZEB.
20 LAHORE GATE.
21 COVERED BAZAR.
22 ARCADED STREET.
23 BHADON PAVILION.
24 SAWAN PAVILION.
25 MOTI MASJID BUILT BY AURANGZEB.
26 HAYAT BAKHSH GARDEN.
27 GARDEN OF MOONLIGHT















RAMPURVA ASOKA COLUMN BEFORE [illegible]



[illegible]





EXCAVATIONS
AT
SANCHI

Buildings Excavated in 1912-19

Ditto Previously Existing

STUPA 1

STUPA 3

To STUPA 2



SANCHI: TOPE 2. PORTION OF RECONSTRUCTED STAIRWAY RAILING



SANCHI: TOPE 2. PORTION OF RECONSTRUCTED GROUND RAILING



SANCHI: MONASTERY 51. INTERIOR VIEW FROM NORTH-WEST AFTER EXCAVATION



SANCHI: TEMPLE 18, AFTER EXCAVATION



(a) SANCHI: PORTION OF POLISHED STONE UMBRELLA OF MAURYAN TECHNIQUE



(b) SANCHI: LOWER PORTION OF MATHURA STATUETTE OF KUSHANA PERIOD



(c) SANCHI: [illegible] PILLAR



(d) [illegible] FROM STUPA [illegible]













(a) TAXILA: STUPA R. PARTIAL VIEW FROM SOUTH-EAST



(b) TAXILA: TEMPLE C, SHOWING TWO PILLAR BASES IN VESTIBULE



(c) TAXILA: CHIR TOPE: BASES AND BERM OF MAIN STUPA ON SOUTH SIDE



(d) TAXILA: CHIR TOPE: STUPA FROM SOUTH-EAST



[illegible]



[illegible]



[illegible]



[illegible]



[illegible]



a.—A ROCK CUT TEMPLE AT MASRUR, KANGRA DISTRICT



b.—A ROCK CUT TEMPLE AT MASRUR, KANGRA DISTRICT

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